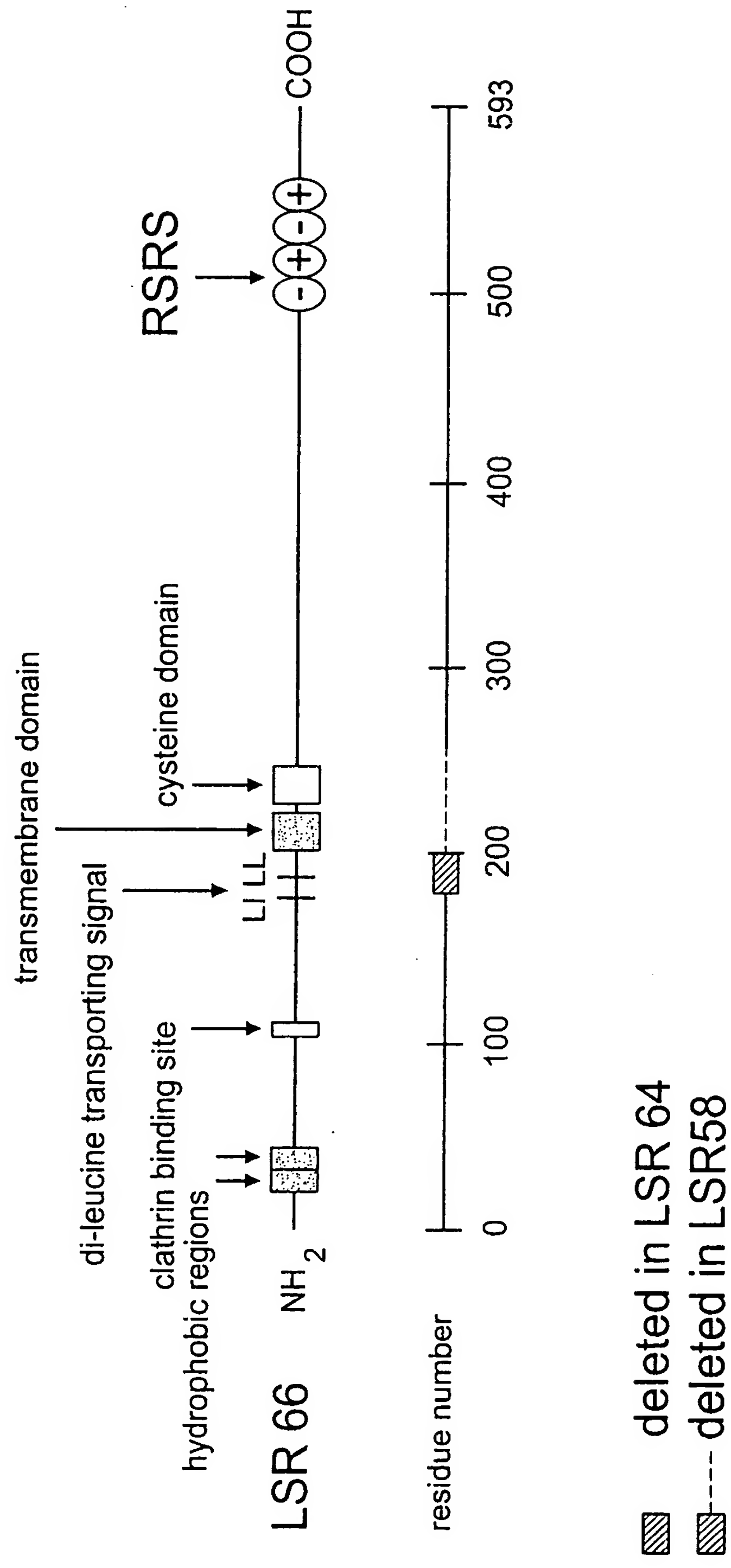


FIG. 1



LSR1.Hs (SEQ ID NO:8)	MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAALLAGGLSRGL
LSR1.Rn (SEQ ID NO:2)	-----MAPAAGACAGAP
LSR1.Mm (SEQ ID NO:16)	-----MAPAASACAGAP
	** *
	FFA
LSR1.Hs (SEQ ID NO:8)	GSHPAAGRDAVVFVWLLLSTWCTAPARAIQVTVSNPYHVILFQPVTLPCITYQMTSTPT
LSR1.Rn (SEQ ID NO:2)	DSHPAT-----VVFVCLFLIIFCPDPASAIQVTVSDPYHVILFQPVTLPCITYQMSNTLT
LSR1.Mm (SEQ ID NO:16)	GSHPAT-----TIFVCLFLIIYCPDRASAIQVTVPDPYHVILFQPVTLHCTYQMSNTLT
	****. ** * * * * * ****
LSR1.Hs (SEQ ID NO:8)	QPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAGNEGYNPYVECDVSVRTVRVVKTKQ
LSR1.Rn (SEQ ID NO:2)	VPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAGNEGYNPYVECDVSVRTVRVVKTKQ
LSR1.Mm (SEQ ID NO:16)	APIVIWKYKSFCDRVDADAFSPASVDNQLNAQLAAGNEGYNPYVECDVSVRTVRVVKTKQ
	*****
LSR1.Hs (SEQ ID NO:8)	GNAVTLGDYYQGRITITGNADLTFTDQTAWGDSGVYCSVVSAQDLQGNNEAYAEIVLG
LSR1.Rn (SEQ ID NO:2)	GNAVTLGDYYQGRITITGNADLTFTDQTAWGDSGVYCSVVSAQDLQGNNEAYAEIVLG
LSR1.Mm (SEQ ID NO:16)	GNAVTLGDYYQGRITITGNADLTFTDQTAWGDSGVYCSVVSAQDLQGNNEAYAEIVLG
	*****
LSR1.Hs (SEQ ID NO:8)	RTSGVAEELPGFQAGPIEDWLFVVVVCLAAFLIFLLLGICWCQCCPHTCCCYVRCPCCPD
LSR1.Rn (SEQ ID NO:2)	RTSEAPEELPGFRAGPLEDWLFVVVVCLASLLFLLLGICWCQCCPHTCCCYVRCPCCPD
LSR1.Mm (SEQ ID NO:16)	RTSEAPEELPGFRAGPLEDWLFVVVVCLASLLFLLLGICWCQCCPHTCCCYVRCPCCPD
	*** *****.***.*****. * *****
LSR1.Hs (SEQ ID NO:8)	KCCCPEALYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPP-AMIPMGPAYNGYPGGYPGD
LSR1.Rn (SEQ ID NO:2)	KCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPY-----GYPGD
LSR1.Mm (SEQ ID NO:16)	KCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMRPPY-----GYPGD
	*****.***** ***** *
LSR1.Hs (SEQ ID NO:8)	VDRSSSAGGQGSYVPLLRDTSVASEVRSGYRIQASQQDDSMRVLYYMEKELANFDPSR
LSR1.Rn (SEQ ID NO:2)	FDRHSSVGGHSSQVPLLRDVGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDPSR
LSR1.Mm (SEQ ID NO:16)	FDRHSSVGGHSSQVPLLRDVGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDPSR
	** ** *.*****. * *.*****
LSR1.Hs (SEQ ID NO:8)	PGPPSGRVERAMSEVTSIHEDDWRSRPSRGPAITPIRDEEWGGHSPRSPRGWDQEPAREQ
LSR1.Rn (SEQ ID NO:2)	PGPPNGRVERAMSEVTSIHEDDWRSRPSRAPALTPIRDEEWNHSPQSPRTWEQEPLQEQ
LSR1.Mm (SEQ ID NO:16)	PGPPNGRVERAMSEVTSIHEDDWRSRPSRAPALTPIRDEEWNHSPRSPRTWEQEPLQEQ
	**** *****.***.*** *
LSR1.Hs (SEQ ID NO:8)	AGGGWRARRPRARSVDALDDLTTPSTAESGRSPTSNGGRSRAYMPRPSRSDDLYPDQDD
LSR1.Rn (SEQ ID NO:2)	PRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPRPSRSDDLYPDQDD
LSR1.Mm (SEQ ID NO:16)	PRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPRPSRSDDLYPDQDD
	***.*****. * ..*** ** * * *

FIG. 2A

LSR1.Hs (SEQ ID NO:8)	SRDFPRSRDPHY-DDFRSRERPPADPRSHHRTDPRDNGSRSGDLPYDGRLLLEEAVRKK
LSR1.Rn (SEQ ID NO:2)	PRDLPHSRDPHYDDIRSRD-PRADPR-SRQRSRDPDAGFRSRDPQYDGRLLLEEALKKK
LSR1.Mm (SEQ ID NO:16)	PRDLPHSRDPHYDDLRSRD-PRADPR-SRQRSHDPRDAGFRSRDPQYDGRLLLEEALKKK
	<div style="text-align: center;"> <div style="border: 1px solid black; display: inline-block; padding: 2px;"> <div style="text-align: center;">+-+</div> </div> </div>
LSR1.Hs (SEQ ID NO:8)	GSEERRRPHKEEEEE--AYYPPAPPYSETDSQASRERRLKKNLALSRESLVV
LSR1.Rn (SEQ ID NO:2)	GSGERRRVYREEEEEEE-GQYPPAPPYSETDSQASRERRLKKNLALSRESLVV
LSR1.Mm (SEQ ID NO:16)	GAGERRRVYREEEEEEEEGHYPPAPPYSETDSQASRERRMKKNLALSRESLVV
	<div style="text-align: center;"> <div style="border: 1px solid black; display: inline-block; padding: 2px;"> <div style="text-align: center;">+-+</div> </div> </div>

FIG. 2B

LSR1.Hs (SEQ ID NO:8)	MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAALLAGGLSRGL
LSR2.Hs (SEQ ID NO:10)	MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAALLAGGLSRGL
LSR3.Hs (SEQ ID NO:12)	MQQDGLGVGTRNGSGKGRSVHPSWPWCAPRPLRYFGRDARARRAQTAAALLAGGLSRGL
	*****
	FFA
LSR1.Hs (SEQ ID NO:8)	GSHPAAAGRDAVVFVWLLSTWCTAPARAIQVTVSNPYHVILFQPVTLPCITYQMTSTPT
LSR2.Hs (SEQ ID NO:10)	GSHPAAAGRDAVVFVWLLSTWCTAPARAIQVTVSNPYHVILFQPVTLPCITYQMTSTPT
LSR3.Hs (SEQ ID NO:12)	GSHPAAAGRDAVVFVWLLSTWCTAPARAIQVTVSNPYHVILFQPVTLPCITYQMTSTPT
	*****
LSR1.Hs (SEQ ID NO:8)	QPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAGNPGYNPYVECDVSVRTVRVVKTKQ
LSR2.Hs (SEQ ID NO:10)	QPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAGNPGYNPYVECDVSVRTVRVVKTKQ
LSR3.Hs (SEQ ID NO:12)	QPIVIWKYKSFCDRIADAFSPASVDNQLNAQLAAGNPGYNPYVECDVSVRTVRVVKTKQ
	*****
LSR1.Hs (SEQ ID NO:8)	GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAEIVLG
LSR2.Hs (SEQ ID NO:10)	GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAEIVL-
LSR3.Hs (SEQ ID NO:12)	GNAVTLGDYYQGRITITGNADLTFDQTAWGDSGVYYCSVVSAQDLQGNNEAYAEIVL-
	*****
LSR1.Hs (SEQ ID NO:8)	RTSGVAEILPFGFQAGPIEDWLFVVVCLAAFLIFLLLGICWCQCCPHTCCCYVRCPCCPD
LSR2.Hs (SEQ ID NO:10)	-----DWLFVVVCLAAFLIFLLLGICWCQCCPHTCCCYVRCPCCPD
LSR3.Hs (SEQ ID NO:12)	-----
	TM
	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
LSR1.Hs (SEQ ID NO:8)	KCCCPEALYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPAMIPMGPAYNGYPGGYPGDV
LSR2.Hs (SEQ ID NO:10)	KCCCPEALYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPAMIPMGPAYNGYPGGYPGDV
LSR3.Hs (SEQ ID NO:12)	-----VYAAGKAATSGVPSIYAPSTYAHLSPAKTPPPAMIPMGPAYNGYPGGYPGDV
	*****
LSR1.Hs (SEQ ID NO:8)	DRSSSAGGQGSYVPLLRTDSSVASEVRSYRIQASQQDDSMRVLYYMEKELANFDPSRP
LSR2.Hs (SEQ ID NO:10)	DRSSSAGGQGSYVPLLRTDSSVASEVRSYRIQASQQDDSMRVLYYMEKELANFDPSRP
LSR3.Hs (SEQ ID NO:12)	DRSSSAGGQGSYVPLLRTDSSVASEVRSYRIQASQQDDSMRVLYYMEKELANFDPSRP
	*****
LSR1.Hs (SEQ ID NO:8)	GPPSGRVERAMSEVTS LHEDDWRSPSRGPALTPIRDEEWGGHSPRS PRGWDQEPAREQA
LSR2.Hs (SEQ ID NO:10)	GPPSGRVERAMSEVTS LHEDDWRSPSRGPALTPIRDEEWGGHSPRS PRGWDQEPAREQA
LSR3.Hs (SEQ ID NO:12)	GPPSGRVERAMSEVTS LHEDDWRSPSRGPALTPIRDEEWGGHSPRS PRGWDQEPAREQA
	*****
LSR1.Hs (SEQ ID NO:8)	GGGWRARRPRARSVDALDDLTPPSTAESGSRSPSTNGGRSRAYMPERSRSDDLQDQDS
LSR2.Hs (SEQ ID NO:10)	GGGWRARRPRARSVDALDDLTPPSTAESGSRSPSTNGGRSRAYMPERSRSDDLQDQDS
LSR3.Hs (SEQ ID NO:12)	GGGWRARRPRARSVDALDDLTPPSTAESGSRSPSTNGGRSRAYMPERSRSDDLQDQDS
	*****

FIG. 3A

LSR1.Hs (SEQ ID NO:8)	RDFPRSRDPHYDDFRSRERPPADPRSHHHRTDPRDNGSRSGDLPYDGRLLLEEAVRKKGS
LSR2.Hs (SEQ ID NO:10)	RDFPRSRDPHYDDFRSRERPPADPRSHHHRTDPRDNGSRSGDLPYDGRLLLEEAVRKKGS
LSR3.Hs (SEQ ID NO:12)	RDFPRSRDPHYDDFRSRERPPADPRSHHHRTDPRDNGSRSGDLPYDGRLLLEEAVRKKGS
	*****
	+ - + -
LSR1.Hs (SEQ ID NO:8)	<div style="border: 1px solid black; display: inline-block; padding: 2px;">EERRRPHKEEEEE</div> AYYPPAPPPYSETDSQASRERRLKKNLALSRESLVV
LSR2.Hs (SEQ ID NO:10)	<div style="border: 1px solid black; display: inline-block; padding: 2px;">EERRRPHKEEEEE</div> AYYPPAPPPYSETDSQASRERRLKKNLALSRESLVV
LSR3.Hs (SEQ ID NO:12)	<div style="border: 1px solid black; display: inline-block; padding: 2px;">EERRRPHKEEEEE</div> AYYPPAPPPYSETDSQASRERRLKKNLALSRESLVV
	*****

FIG. 3B

	FFA
LSR1.Rn (SEQ ID NO:2)	MAPAAGACAGAPDSHPATVVFVCLFLIIFCPDPASAIQVTVSDPYHVVILFQPVTLPCITY
LSR2.Rn (SEQ ID NO:4)	MAPAAGACAGAPDSHPATVVFVCLFLIIFCPDPASAIQVTVSDPYHVVILFQPVTLPCITY
LSR3.Rn (SEQ ID NO:6)	MAPAAGACAGAPDSHPATVVFVCLFLIIFCPDPASAIQVTVSDPYHVVILFQPVTLPCITY
	*****
LSR1.Rn (SEQ ID NO:2)	QMSNTLTVPIVIWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGYNPYVEECQDSVRTV
LSR2.Rn (SEQ ID NO:4)	QMSNTLTVPIVIWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGYNPYVEECQDSVRTV
LSR3.Rn (SEQ ID NO:6)	QMSNTLTVPIVIWKYKSFCRDRIADAFSPASVDNQLNAQLAAGNPGYNPYVEECQDSVRTV
	*****
LSR1.Rn (SEQ ID NO:2)	RVVATKQGNAVTLGDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
LSR2.Rn (SEQ ID NO:4)	RVVATKQGNAVTLGDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
LSR3.Rn (SEQ ID NO:6)	RVVATKQGNAVTLGDYYQGRRITITGNADLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
	*****
LSR1.Rn (SEQ ID NO:2)	AELIVLGRTSEAPELEPGFRAGPLEDWLFVVVVCLASLLLFLLLGICWCQCCPHTCCCYV
LSR2.Rn (SEQ ID NO:4)	AELIVL-----DWLFVVVVCLASLLLFLLLGICWCQCCPHTCCCYV
LSR3.Rn (SEQ ID NO:6)	AELIVL-----DWLFVVVVCLASLLLFLLLGICWCQCCPHTCCCYV
	*****
LSR1.Rn (SEQ ID NO:2)	RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP
LSR2.Rn (SEQ ID NO:4)	RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP
LSR3.Rn (SEQ ID NO:6)	-----VYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMGPPYGYP
	*****
LSR1.Rn (SEQ ID NO:2)	GDFDRHSSVGGHSSQVPLLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
LSR2.Rn (SEQ ID NO:4)	GDFDRHSSVGGHSSQVPLLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
LSR3.Rn (SEQ ID NO:6)	GDFDRHSSVGGHSSQVPLLRDVDGSVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
	*****
LSR1.Rn (SEQ ID NO:2)	SRPGPPNGRVERAMSEVTSIHEDDWRSRPSRAPALTPIRDEEWNRHSPQSPRTWEQEPLQ
LSR2.Rn (SEQ ID NO:4)	SRPGPPNGRVERAMSEVTSIHEDDWRSRPSRAPALTPIRDEEWNRHSPQSPRTWEQEPLQ
LSR3.Rn (SEQ ID NO:6)	SRPGPPNGRVERAMSEVTSIHEDDWRSRPSRAPALTPIRDEEWNRHSPQSPRTWEQEPLQ
	*****
LSR1.Rn (SEQ ID NO:2)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPPRSRSRDDLYDP
LSR2.Rn (SEQ ID NO:4)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPPRSRSRDDLYDP
LSR3.Rn (SEQ ID NO:6)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPPRSRSRDDLYDP
	*****
LSR1.Rn (SEQ ID NO:2)	DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLLLEEALKKK
LSR2.Rn (SEQ ID NO:4)	DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLLLEEALKKK
LSR3.Rn (SEQ ID NO:6)	DDPRDLPHSRDPHYDDIRSRDPRADPRSRQSRDPRDAGFRSRDPQYDGRLLLEEALKKK
	*****

FIG. 4A

		+-+
LSR1.Rn (SEQ ID NO:2)	GSGERRRVYREEEEEEE	GQYPPAPPYSETDSQASRERRLKKNLALSRESLVV
LSR2.Rn (SEQ ID NO:4)	GSGERRRVYREEEEEEE	GQYPPAPPYSETDSQASRERRLKKNLALSRESLVV
LSR3.Rn (SEQ ID NO:6)	GSGERRRVYREEEEEEE	GQYPPAPPYSETDSQASRERRLKKNLALSRESLVV
	*****	

FIG. 4B



FFA

LSR1.Mm (SEQ ID NO:16)	MAPAASACAGAPGSHPATTIFVCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY
LSR2.Mm (SEQ ID NO:17)	MAPAASACAGAPGSHPATTIFVCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY
LSR1.Mm (SEQ ID NO:18)	MAPAASACAGAPGSHPATTIFVCLFLIIYCPDRASAIQVTVPDPYHVVILFQPVTLHCTY
	*****
LSR1.Mm (SEQ ID NO:16)	QMSNTLTAPIVIWKYKSFCRDRVADAFSPASVDNQLNAQLAAGNPGYNPYVEQCDSVRTV
LSR2.Mm (SEQ ID NO:17)	QMSNTLTAPIVIWKYKSFCRDRVADAFSPASVDNQLNAQLAAGNPGYNPYVEQCDSVRTV
LSR3.Mm (SEQ ID NO:18)	QMSNTLTAPIVIWKYKSFCRDRVADAFSPASVDNQLNAQLAAGNPGYNPYVEQCDSVRTV
	*****
LSR1.Mm (SEQ ID NO:16)	RVVATKQGNAVTLGDIYQGRITITGNAGLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
LSR2.Mm (SEQ ID NO:17)	RVVATKQGNAVTLGDIYQGRITITGNAGLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
LSR2.Mm (SEQ ID NO:18)	RVVATKQGNAVTLGDIYQGRITITGNAGLTFEQTAWGDSGVYYCSVVSAQDLGDNNEAY
	*****
LSR1.Mm (SEQ ID NO:16)	AEELVLGRTSEAPELLPGFRAGPLEDWLFVVVCLASLLFFLLLGICWCQCCPHTCCCYV
LSR2.Mm (SEQ ID NO:17)	AEELVL-----DWLFVVVCLASLLFFLLLGICWCQCCPHTCCCYV
LSR3.Mm (SEQ ID NO:18)	AEELVL-----
	*****
LSR1.Mm (SEQ ID NO:16)	RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMRPPYGYP
LSR2.Mm (SEQ ID NO:17)	RCPCCPDKCCCPEALYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMRPPYGYP
LSR3.Mm (SEQ ID NO:18)	-----VYAAGKAATSGVPSIYAPSIYTHLSPAKTPPPPPAMIPMRPPYGYP
	*****
LSR1.Mm (SEQ ID NO:16)	GDFDRTSSVGGHSSQVPLLREVDGVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
LSR2.Mm (SEQ ID NO:17)	GDFDRTSSVGGHSSQVPLLREVDGVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
LSR3.Mm (SEQ ID NO:18)	GDFDRTSSVGGHSSQVPLLREVDGVSSEVRSGYRIQANQQDDSMRVLYYMEKELANFDP
	*****
LSR1.Mm (SEQ ID NO:16)	SRPGPPNGRVERAMSEVTS LHEDDWSRPSRAPALTPIRDEEWNRHSPRSPRTWEQEPLQ
LSR2.Mm (SEQ ID NO:17)	SRPGPPNGRVERAMSEVTS LHEDDWSRPSRAPALTPIRDEEWNRHSPRSPRTWEQEPLQ
LSR3.Mm (SEQ ID NO:18)	SRPGPPNGRVERAMSEVTS LHEDDWSRPSRAPALTPIRDEEWNRHSPRSPRTWEQEPLQ
	*****
LSR1.Mm (SEQ ID NO:16)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPERSRSDLYDP
LSR2.Mm (SEQ ID NO:17)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPERSRSDLYDP
LSR3.Mm (SEQ ID NO:18)	EQPRGGWGSGRPRARSVDALDDINRPGSTESGRSSPPSSGRRGRAYAPERSRSDLYDP
	*****
LSR1.Mm (SEQ ID NO:16)	DDPRDLPHSRDPHYDDLSRDPRADPRSRQRSHDPRDAGFRSRDPQYDGRLLLEEALKKK
LSR2.Mm (SEQ ID NO:17)	DDPRDLPHSRDPHYDDLSRDPRADPRSRQRSHDPRDAGFRSRDPQYDGRLLLEEALKKK
LSR3.Mm (SEQ ID NO:18)	DDPRDLPHSRDPHYDDLSRDPRADPRSRQRSHDPRDAGFRSRDPQYDGRLLLEEALKKK
	*****

FIG. 5A



+--+

LSR1.Mm (SEQ ID NO:16)	GAGERRRVYREEEEEEEB	GHYPPAPPYSETDSQASRERRMKKNLALSRESLVV
LSR2.Mm (SEQ ID NO:17)	GAGERRRVYREEEEEEEB	GHYPPAPPYSETDSQASRERRMKKNLALSRESLVV
LSR3.Mm (SEQ ID NO:18)	GAGERRRVYREEEEEEEB	GHYPPAPPYSETDSQASRERRMKKNLALSRESLVV

\*\*\*\*\*

FIG. 5B

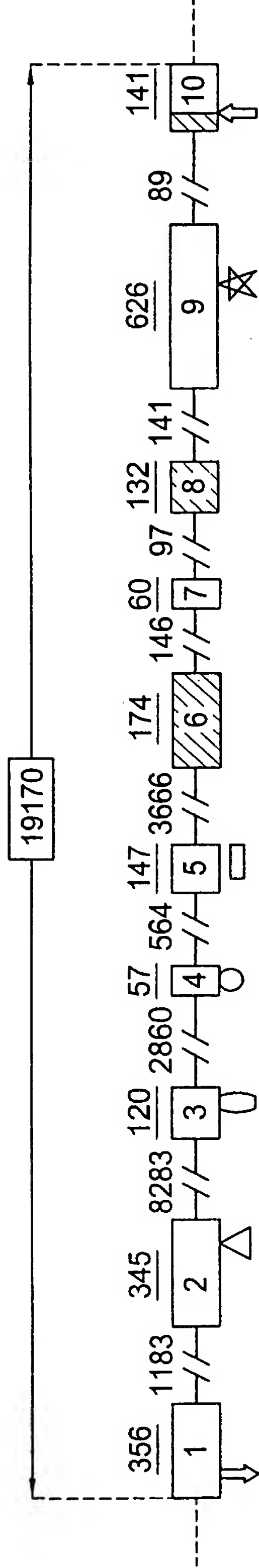


FIG. 6A

Patterns/ Signal	
△	: NPGY
○	: Di-leucine/ LI
○	: Di-leucine/ LL
□	: TNF-receptor
☆	: RSRS
↓	: ATG
↑	: STOP

LSR\_Hs\_2062 (649 aa)

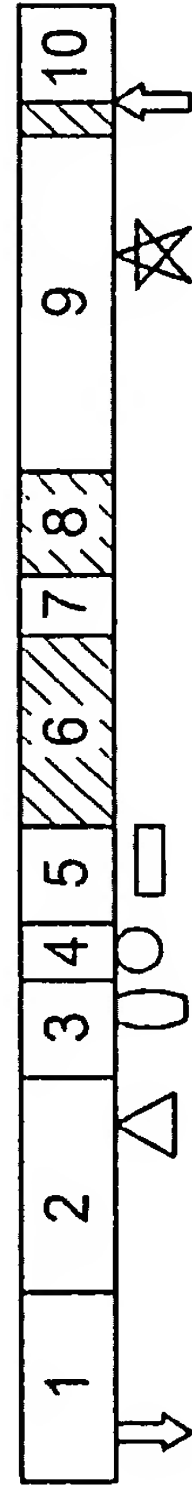


FIG. 6B

LSR\_Hs\_2005 (630 aa)

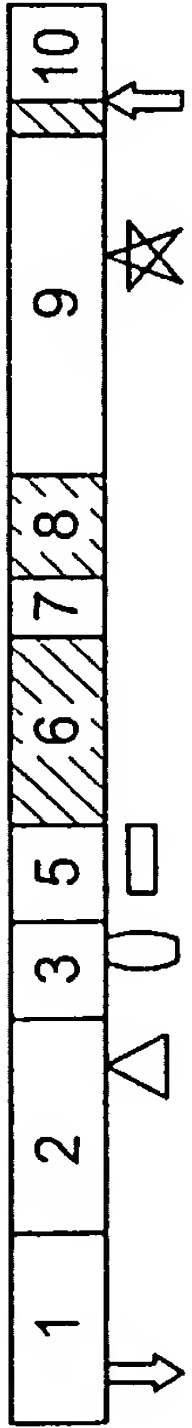


FIG. 6C

LSR\_Hs\_1858 (581 aa)

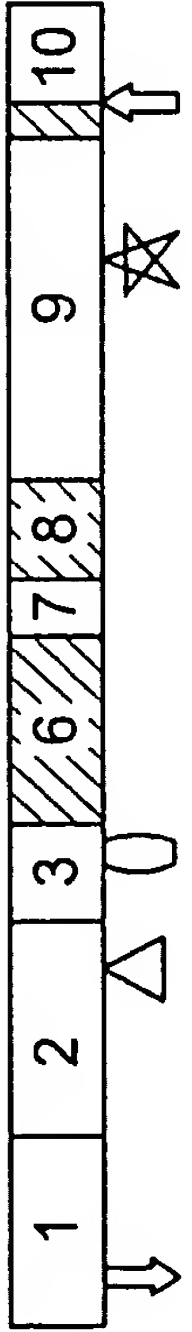


FIG. 6D

lsr1.Hs (SEQ ID NO:7)	TGGAGTGTGGCTCGGAGGACCGCGGCGGGTCAAGCACCTTTCTCCCCCATATCTGAAAGC
lsr1.Rn (SEQ ID NO:1)	-----ACCGCTCACCAGGTCAGTTGTCCCCGGAAGCCGAAGGC
lsr1.Mm (SEQ ID NO:13)	-----
lsr1.Hs (SEQ ID NO:7)	ATGCCCTTTGTCCACGTCGTTTACGCTCATTAATACT--TCCAGAATGCAACAGGACGGA
lsr1.Rn (SEQ ID NO:1)	ATGAGCTTCGCCCAAGTTCTTTTATGGGTTAGAACTCCTCCAGAGCGGGGGAAGGA
lsr1.Mm (SEQ ID NO:13)	-----
lsr1.Hs (SEQ ID NO:7)	CTTGGAGTAGGGACAAGGAACGGAAGTGGGAAGGGGAGGAGCGTGACCCCTCCTGGCCT
lsr1.Rn (SEQ ID NO:1)	CTTGAATAGGGGC-----GGGACGGAGCACGCACCCTTCTCCGCCT
lsr1.Mm (SEQ ID NO:13)	-----
lsr1.Hs (SEQ ID NO:7)	TGGTGCGCGCCGCGCCCCCTA-----AGGTACTTTGGAAGGGACGCGCGGGC-CAGACG
lsr1.Rn (SEQ ID NO:1)	TGGTTCTCGCCGCGCCCCCTACTCTCGGGATACTTGGGAGGGGACGCGCGGGCACCGTCG
lsr1.Mm (SEQ ID NO:13)	-----GCACCGTCG
	* * * * *
lsr1.Hs (SEQ ID NO:7)	CGCCCAGACGGCCGCGATGGCGCTGTTGGCCGGCGGGCTCTCCAGAGGGCTGGGCTCCCA
lsr1.Rn (SEQ ID NO:1)	CTGCTAGACGGCCGCGATGGCGCCGGCGGGCGCGGTGTGCTGGGGCGCCTGACTCCCA
lsr1.Mm (SEQ ID NO:13)	CTGCTAGACGGCCGCGATGGCGCCGGCGGCCAGCGCGTGTGCTGGGGCGCCTGGCTCCCA
	* * * * *
lsr1.Hs (SEQ ID NO:7)	CCCGGCCGCGCAGGCCGGGACGCGGTCTTCTGCTTAGCACCTGGTG
lsr1.Rn (SEQ ID NO:1)	CCCAGCTACCGTGG-----TCTTCGTGTGTCTCTTTCTCATCATTTTCTG
lsr1.Mm (SEQ ID NO:13)	CCCGGCCACCACGA-----TCTTCGTGTGTCTTTTCTCATCATTTACTG
	*** ** * * * * * * * * *
lsr1.Hs (SEQ ID NO:7)	CACAGCTCCTGCCAGGGCCATCCAGGTGACCGTGTCCAACCCCTACCACGTGGTGATCCT
lsr1.Rn (SEQ ID NO:1)	CCCAGACCCTGCCAGTGCCATCCAGGTGACTGTGTCTGACCCCTACCACGTAGTGATCCT
lsr1.Mm (SEQ ID NO:13)	CCCAGACCGTGCCAGTGCCATCCAGGTGACCGTGCTGACCCCTACCACGTAGTGATCCT
	* * * * *
lsr1.Hs (SEQ ID NO:7)	CTTCCAGCCTGTGACCCCTGCCCTGTACCTACCAGATGACCTCGACCCCCACGCAACCCAT
lsr1.Rn (SEQ ID NO:1)	GTTCCAGCCAGTGACCCCTGCCCTGCACCTATCAGATGAGCAAACTCTCACAGTCCCAT
lsr1.Mm (SEQ ID NO:13)	GTTCCAGCCAGTGACACTACACTGCACCTACCAGATGAGCAATACCCTCACAGCCCCTAT
	* * * * *
lsr1.Hs (SEQ ID NO:7)	CGTCATCTGGAAGTACAAGTCTTTCTGCCGGGACCGCATCGCCGATGCCTTCTCCCCGGC
lsr1.Rn (SEQ ID NO:1)	CGTGATCTGGAAGTACAAGTCATTCTGCCGGGACCGTATTGCCGATGCCTTCTCTCCTGC
lsr1.Mm (SEQ ID NO:13)	CGTGATCTGGAAGTATAAGTCGTTCTGTGCGGACCGTGTGCGGACGCCTTCTCCCCTGC
	*** * * * * * * * * * *

FIG. 7A

lsr1.Hs (SEQ ID NO:7)	CAGCGTCGACAACCAGCTCAATGCCAGCTGGCAGCCGGGAACCCAGGCTACAACCCCTA
lsr1.Rn (SEQ ID NO:1)	CAGTGTGGACAACCAGCTAAATGCCAGTTGGCAGCTGGCAACCCCGGCTACAACCCCTA
lsr1.Mm (SEQ ID NO:13)	CAGCGTGGACAACCAGCTCAACGCCAGCTGGCGGCTGGCAACCCCGGCTACAACCCCTA
	*** ** ***** ** ***** ** ** ***** *****
lsr1.Hs (SEQ ID NO:7)	CGTTGAGTGCCAGGACAGCGTGCGCACCGTCAGGGTCGTGGCCACCAAGCAGGGCAACGC
lsr1.Rn (SEQ ID NO:1)	TGTGGAGTGCCAGGACAGTGTACGCACTGTCAGGGTGGTGGCCACCAAACAGGGCAATGC
lsr1.Mm (SEQ ID NO:13)	TGTGGAGTGCCAGGACAGCGTACGCACTGTCAGGGTGGTGGCCACCAAACAGGGCAATGC
	** ***** ** ***** ***** ***** ***** **
lsr1.Hs (SEQ ID NO:7)	TGTGACCCTGGGAGATTACTACCAGGGCCGGAGGATTACCATCACCGGAAATGCTGACCT
lsr1.Rn (SEQ ID NO:1)	GGTGACCCTGGGAGACTACTACCAAGGCAGGAGGATCACCATAACAGGAAATGCTGACCT
lsr1.Mm (SEQ ID NO:13)	TGTGACCCTGGGAGACTACTACCAGGGCAGGAGAATCACCATCACAGGAAATGCTGGCCT
	***** ***** ** ***** ** ***** ** ***** *****
lsr1.Hs (SEQ ID NO:7)	GACCTTTGACCAGACGGCGTGCGGGGACAGTGGTGTGTATTACTGCTCCGTGGTCTCAGC
lsr1.Rn (SEQ ID NO:1)	GACCTTCGAGCAGACAGCCTGGGGAGACAGTGGAGTGTATTACTGCTCTGTGGTCTCGGC
lsr1.Mm (SEQ ID NO:13)	GACCTTCGAGCAGACGGCCTGGGGAGACAGTGGAGTGTATTACTGCTCCGTGGTCTCAGC
	***** ** ***** ** ***** ***** ***** ***** *****
lsr1.Hs (SEQ ID NO:7)	CCAGGACCTCCAGGGGAACAATGAGGCCTACGCAGAGCTCATCGTCCTTGGGAGGACCTC
lsr1.Rn (SEQ ID NO:1)	CCAAGATCTGGATGGAAACAACGAGGCGTACGCAGAGCTCATCGTCCTTGGCAGGACCTC
lsr1.Mm (SEQ ID NO:13)	CCAAGATCTGGATGGGAACAACGAGGCGTACGCAGAGCTCATTGTCCTTGGCAGGACCTC
	*** ** * ** ***** ***** ***** ***** *****
lsr1.Hs (SEQ ID NO:7)	AGGGGTGGCTGAGCTCTTACCTGGTTTTTCAGGCGGGGCCCATAGAAGACTGGCTCTTCGT
lsr1.Rn (SEQ ID NO:1)	AGAGGCCCTGAGCTCCTACCTGGTTTTTCGGGCGGGGCCCTTGAAGATTGGCTCTTTGT
lsr1.Mm (SEQ ID NO:13)	AGAAGCCCCTGAGCTCCTACCTGGTTTTTCGGGCGGGGCCCTTGAAGATTGGCTCTTTGT
	** * ***** ***** ***** ***** * ***** *****
lsr1.Hs (SEQ ID NO:7)	GGTTGTGGTATGCCTGGCTGCCTTCCTCATCTTCCTCCTCCTGGGCATCTGCTGGTGCCA
lsr1.Rn (SEQ ID NO:1)	GGTCGTGGTCTGCCTGGCGAGCCTCCTCCTCTTCCTCCTCCTGGGCATCTGCTGGTGCCA
lsr1.Mm (SEQ ID NO:13)	GGTCGTGGTCTGCCTGGCAAGCCTCCTCTTCTTCCTCCTCCTGGGCATCTGCTGGTGCCA
	*** ***** ***** * ***** ***** ***** *****
lsr1.Hs (SEQ ID NO:7)	GTGCTGCCCCGACACTTGCTGCTGCTACGTCAGGTGCCCCTGCTGCCCAGACAAGTGCTG
lsr1.Rn (SEQ ID NO:1)	GTGCTGTCCCTCACACCTGCTGCTGCTATGTCCGATGTCCCTGCTGCCCAGACAAGTGCTG
lsr1.Mm (SEQ ID NO:13)	GTGCTGTCCCCACACCTGCTGCTGCTATGTTCAGATGTCCCTGCTGCCCAGACAAGTGCTG
	***** ** ***** ***** ***** * ** ***** *****
lsr1.Hs (SEQ ID NO:7)	CTGCCCCGAGGCCCTGTATGCCGCCGGCAAAGCAGCCACCTCAGGTGTTCCAGCATTTA
lsr1.Rn (SEQ ID NO:1)	TTGCCCTGAGGCTCTTTATGCTGCTGGCAAAGCAGCCACCTCAGGTGTCCCGAGCATCTA
lsr1.Mm (SEQ ID NO:13)	TTGCCCTGAGGCCCTTTATGCTGCTGGCAAAGCAGCCACCTCAGGTGTGCCAAGCATCTA
	***** ***** ** ***** ** ***** ***** ***** *****

FIG. 7B

lsr1.Hs (SEQ ID NO:7)	TGCCCCCAGCACCTATGCCACCTGTCTCCCGCCAAGACCCACC---CCCACCAGCTAT
lsr1.Rn (SEQ ID NO:1)	TGCCCCCAGCATCTATAACCCACCTCTCACCTGCCAAGACCCACCACCTCCGCCTGCCAT
lsr1.Mm (SEQ ID NO:13)	TGCCCCCAGCATCTATAACCCACCTCTCTCCTGCCAAGACTCCGCCACCTCCGCCTGCCAT
	*****
lsr1.Hs (SEQ ID NO:7)	GATTCCCATGGGCCCTGCCTACAACGGGTACCCTGGAGGATACCCTGGAGACGTTGACAG
lsr1.Rn (SEQ ID NO:1)	GATTCCCATGGGCCCTCCCTAT-----GGGTACCCTGGAGACTTTGACAG
lsr1.Mm (SEQ ID NO:13)	GATTCCCATGCGTCCTCCCTAT-----GGGTACCCTGGAGACTTTGACAG
	*****
lsr1.Hs (SEQ ID NO:7)	GAGTAGCTCAGCTGGTGGCCAAGGCTCCTATGTACCCCTGCTTCGGGACACGGACAGCAG
lsr1.Rn (SEQ ID NO:1)	ACATAGCTCAGTTGGTGGCCACAGCTCCCAAGTACCCCTGCTGCGTGACGTGGATGGCAG
lsr1.Mm (SEQ ID NO:13)	GACCAGCTCAGTTGGTGGCCACAGCTCCCAGGTGCCCTGCTGCGTGAAGTGGATGGGAG
	*****
lsr1.Hs (SEQ ID NO:7)	TGTGGCCTCTGAAGTCCGCAGTGGCTACAGGATTCAGGCCAGCCAGCAGGACGACTCCAT
lsr1.Rn (SEQ ID NO:1)	TGTATCTTCAGAAGTACGAAGTGGCTACAGGATCCAGGCTAACCAGCAAGATGACTCCAT
lsr1.Mm (SEQ ID NO:13)	CGTATCTTCAGAAGTACGAAGTGGCTACAGGATCCAGGCTAACCAGCAAGATGACTCCAT
	*****
lsr1.Hs (SEQ ID NO:7)	GCGGGTCCTGTACTACATGGAGAAGGAGCTGGCCAACCTTCGACCCTTCTCGACCTGGCCC
lsr1.Rn (SEQ ID NO:1)	GAGGGTCCTATACTATATGGAGAAAGAGCTAGCCAACCTTTGACCCTTCCCGACCTGGCCC
lsr1.Mm (SEQ ID NO:13)	GAGGGTCCTATACTATATGGAGAAGGAGCTAGCCAACCTTCGATCCTTCCCGGCCTGGCCC
	*****
lsr1.Hs (SEQ ID NO:7)	CCCCAGTGGCCGTGTGGAGCGGGCCATGAGTGAAGTCACCTCCCTCCACGAGGACGACTG
lsr1.Rn (SEQ ID NO:1)	TCCCAATGGCAGAGTGGAAACGGGCCATGAGTGAAGTAACCTCCCTCCATGAAGATGACTG
lsr1.Mm (SEQ ID NO:13)	TCCCAATGGCCGAGTGGAAACGGGCCATGAGTGAAGTAACCTCCCTCCATGAAGATGACTG
	*****
lsr1.Hs (SEQ ID NO:7)	GCGATCTCGGCCTTCCCGGGGCCCTGCCCTCACCCCGATCCGGGATGAGGAGTGGGGTGG
lsr1.Rn (SEQ ID NO:1)	GCGATCGAGGCCTTCCAGGGCTCCTGCCCTCACCCCGATCAGGGATGAGGAGTGGGAATCG
lsr1.Mm (SEQ ID NO:13)	GCGATCTCGGCCTTCCAGGGCTCCTGCCCTCACCCCGATCAGGGATGAGGAGTGGGAATCG
	*****
lsr1.Hs (SEQ ID NO:7)	CCACTCCCCCGGAGTCCCAGGGGATGGGACCAGGAGCCCGCCAGGGAGCAGGCAGGCGG
lsr1.Rn (SEQ ID NO:1)	CCACTCCCCACAGAGTCCCAGAACATGGGAGCAGGAACCCCTTCAAGAACAACCAAGGGG
lsr1.Mm (SEQ ID NO:13)	CCACTCCCCTCGGAGTCCCAGAACATGGGAGCAGGAACCCCTTCAAGAACAGCCAAGGGG
	*****
lsr1.Hs (SEQ ID NO:7)	GGGCTGGCGGGCCAGGCGGCCCCGGGCCCGCTCCGTGGACGCCCTGGACGACCTCACCCC
lsr1.Rn (SEQ ID NO:1)	TGGTTGGGGGTCTGGACGCCCTCGGGCCCGCTCTGTGGATGCTCTAGATGATATCAACCG
lsr1.Mm (SEQ ID NO:13)	TGGTTGGGGGTCTGGGCGGCCTCGGGCCCGCTCTGTGGATGCTCTAGATGACATCAACCG
	*****

FIG. 7C

lsr1.Hs (SEQ ID NO:7)	GCCGAGCACCGCCGAGTCAGGGAGCAGGTCTCCACGAGTAATGGTGGGAGAAGCCGGGC
lsr1.Rn (SEQ ID NO:1)	GCCTGGCTCCACTGAATCAGGACGGTCTTCTCCCCCAAGTAGTGGACGGAGAGGACGGGC
lsr1.Mm (SEQ ID NO:13)	GCCTGGCTCCACTGAATCAGGAAGGTCTTCTCCCCCAAGTAGTGGACGGAGAGGGCGGGC
	*** ** *
lsr1.Hs (SEQ ID NO:7)	CTACATGCCCCCGCGGAGCCGACCCGGGACGACCTCTATGACCAAGACGACTCGAGGGA
lsr1.Rn (SEQ ID NO:1)	CTATGCACCTCCAAGAAGTCGCAGCCGGGATGACCTCTATGACCCGGACGATCCTAGGGA
lsr1.Mm (SEQ ID NO:13)	CTATGCACCTCCGAGAAGTCGCAGCCGGGATGACCTCTATGACCCCGACGATCCTAGAGA
	*** ** *
lsr1.Hs (SEQ ID NO:7)	CTTCCCACGCTCCCGGGACCCCCACTAC---GACGACTTCAGGTCTCGGGAGCGCCCTCC
lsr1.Rn (SEQ ID NO:1)	CTTGCCACATTCCCGAGATCCCCACTATTATGACGACATCAGGTCTAGAGA---TCCACG
lsr1.Mm (SEQ ID NO:13)	CTTGCCACATTCCCGAGATCCCCACTATTATGATGATTTGAGGTCTAGGGA---TCCACG
	*** *
lsr1.Hs (SEQ ID NO:7)	TGCCGACCCCAGGTCCCACCACCACCGTACCCGGGACCCTCGGGACAACGGCTCCAGGTC
lsr1.Rn (SEQ ID NO:1)	TGCTGACCCCAGATCCCGTCAGC---GATCCCGAGATCCTCGGGATGCTGGCTTCAGGTC
lsr1.Mm (SEQ ID NO:13)	TGCTGACCCCAGATCCCGTCAGC---GATCCCACGATCCTCGGGATGCTGGCTTCAGGTC
	*** *
lsr1.Hs (SEQ ID NO:7)	CGGGGACCTCCCCTATGATGGGCGGCTACTGGAGGAGGCTGTGAGGAAGAAGGGGTCGGA
lsr1.Rn (SEQ ID NO:1)	AAGGGACCCTCAGTATGATGGGCGACTATTAGAAGAGGCTTTAAAGAAAAAGGGGTCGGG
lsr1.Mm (SEQ ID NO:13)	ACGGGACCCTCAGTATGATGGGCGACTCTTAGAAGAGGCTTTAAAGAAAAAGGGGCTGG
	***** *
lsr1.Hs (SEQ ID NO:7)	GGAGAGGAGGAGACCCACAAGGAGGA-----GGAGGAAGAGGCCTACTACCCGCC
lsr1.Rn (SEQ ID NO:1)	CGAGAGAAGGAGGGTTTACAGGGAGGAAGAAGA---GGAAGAGGAGGGCCAATACCCCCC
lsr1.Mm (SEQ ID NO:13)	GGAGAGAAGACGCGTTTACAGGGAGGAAGAAGAAGAAGAAGAGGAGGGCCACTATCCCCC
	***** ** *
lsr1.Hs (SEQ ID NO:7)	CGCGCCGCCCCCGTACTCGGAGACCGACTCGCAGGCGTCCCGAGAGCGCAGGCTCAAGAA
lsr1.Rn (SEQ ID NO:1)	AGCACCTCCACCTTACTCAGAGACTGACTCGCAGGCCTCACGGGAGAGGAGGCTGAAAAA
lsr1.Mm (SEQ ID NO:13)	AGCACCTCCGCCTTACTCTGAGACTGACTCGCAGGCCTCGAGGGAGCGGAGGATGAAAAA
	** ** *
lsr1.Hs (SEQ ID NO:7)	GAACTTGGCCCTGAGTCGGGAAAGTTTAGTCGTCTGATCTGACGTT:-----
lsr1.Rn (SEQ ID NO:1)	GAATTTGGCCCTGAGTCGGGAAAGTTTAGTCGTCTGATCC-ACGTTTTGT-ATGTAGCTT
lsr1.Mm (SEQ ID NO:13)	GAATTTGGCCCTGAGTCGGGAAAGTTTAGTCGTCTGATCCACGTTTTGTTATGTAGCTT
	*** *
lsr1.Hs (SEQ ID NO:7)	-----
lsr1.Rn (SEQ ID NO:1)	TTGTACTTTTTTTTAAATTGGAATCAATATTGATGAAACTTCAAGCCTAATAAATGTCT
lsr1.Mm (SEQ ID NO:13)	TTTACTTTTTTTTAAATTGGAATATTGATGA--AACTCTTCACCAAGCCTAATAAAA-----

FIG. 7D

lsr1.Hs (SEQ ID NO:7) -----  
lsr1.Rn (SEQ ID NO:1) AATCACAAAAAAAAAAAA  
lsr1.Mm (SEQ ID NO:13) -----

FIG. 7E



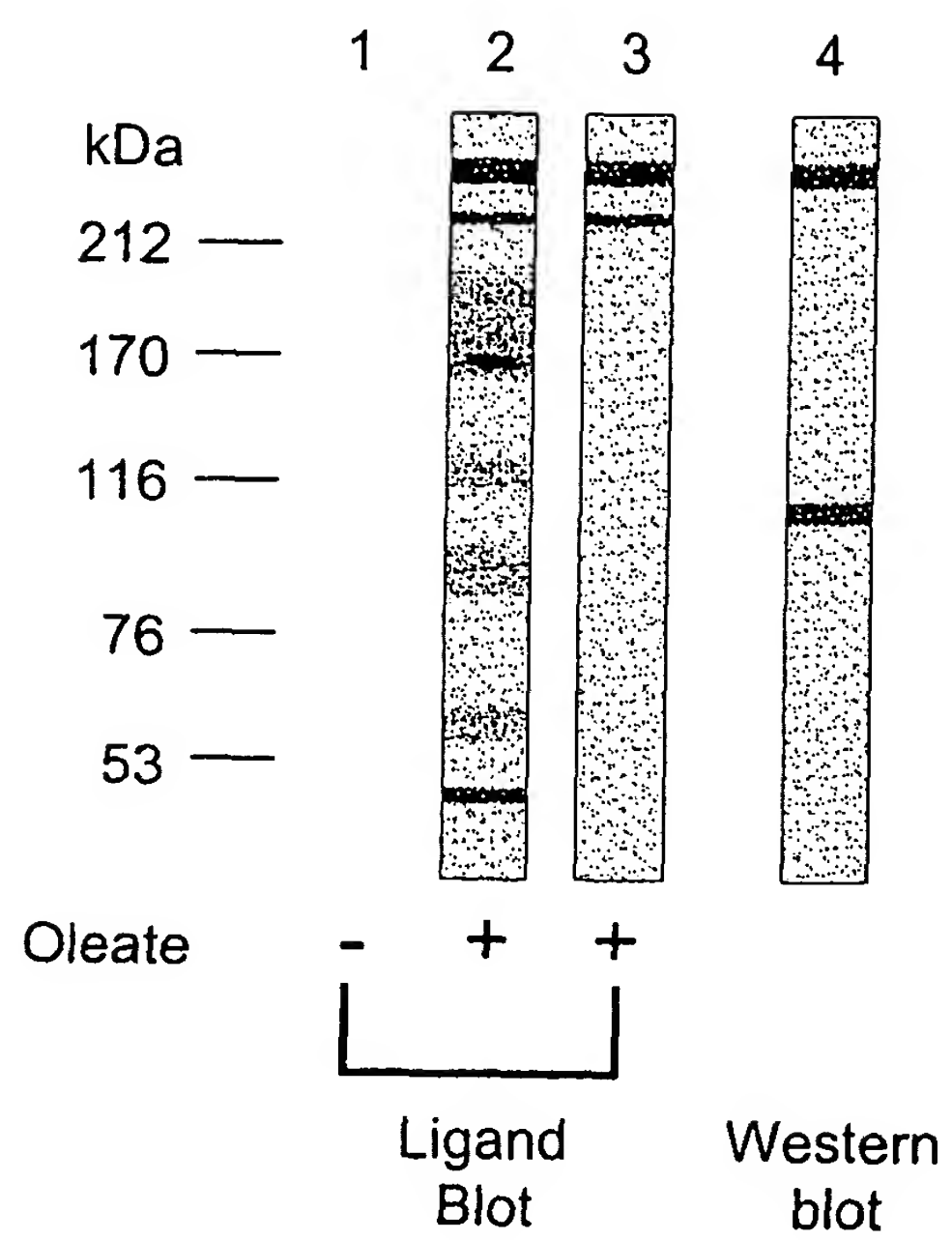


FIG. 8

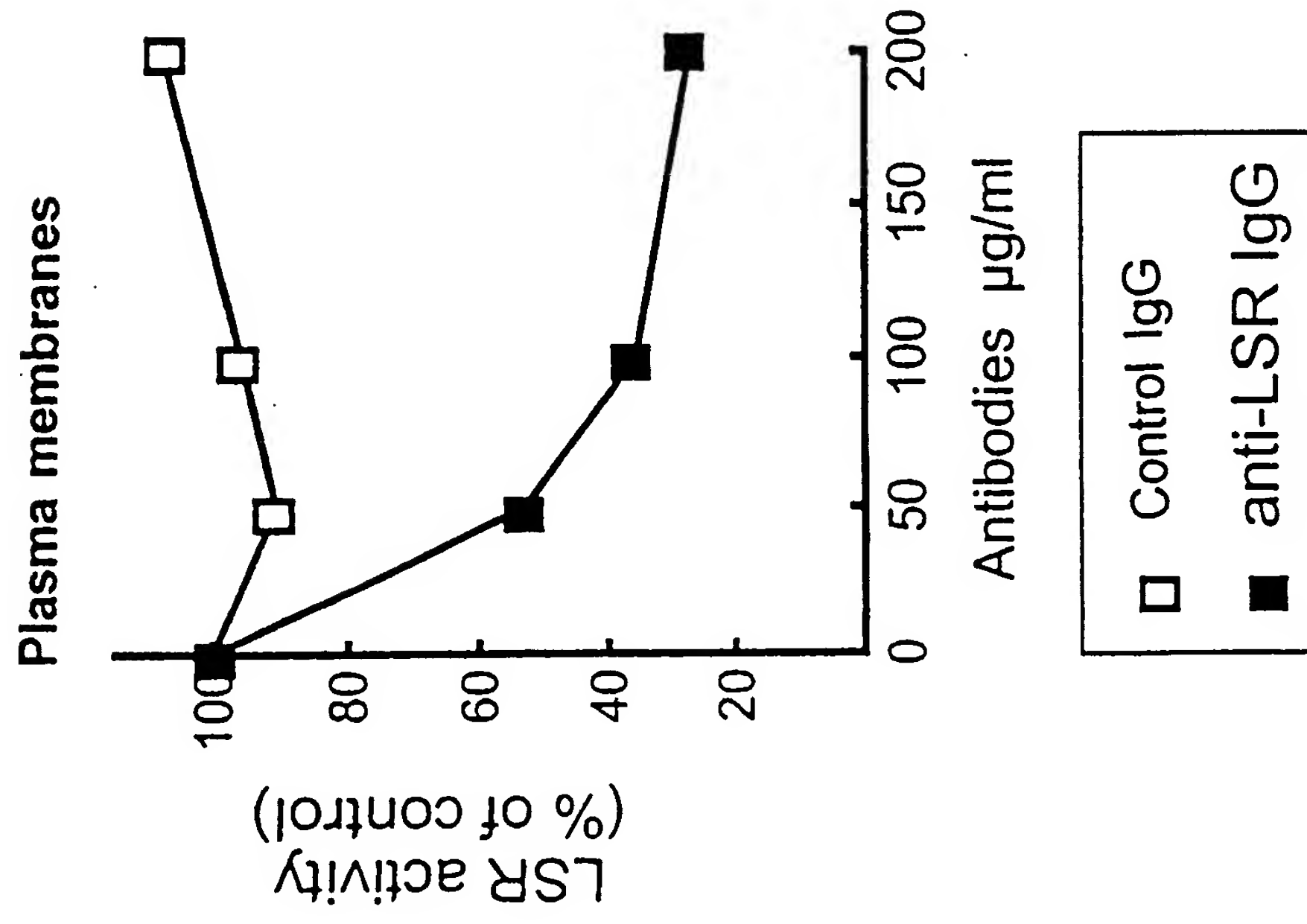


FIG. 9A

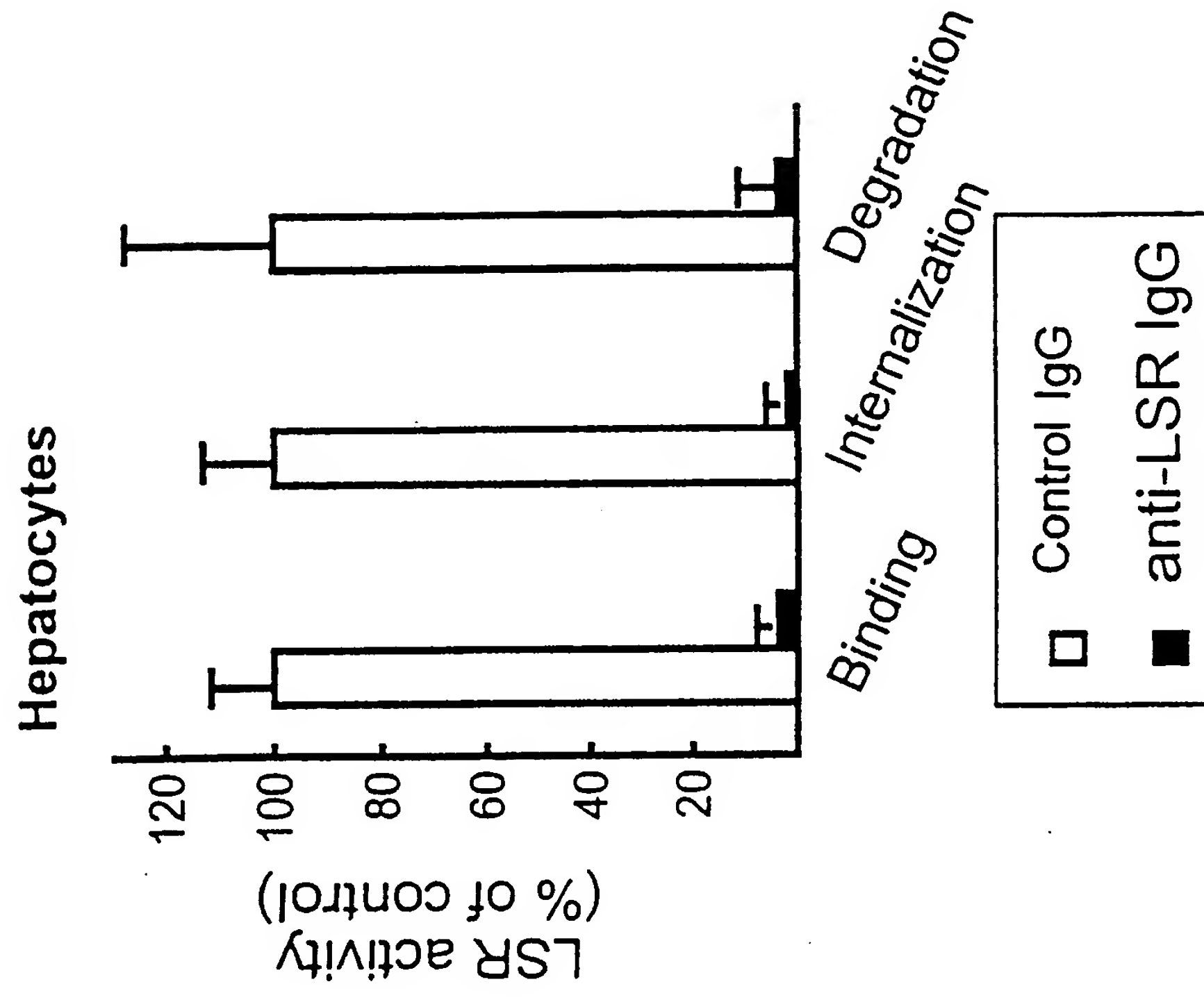


FIG. 9B

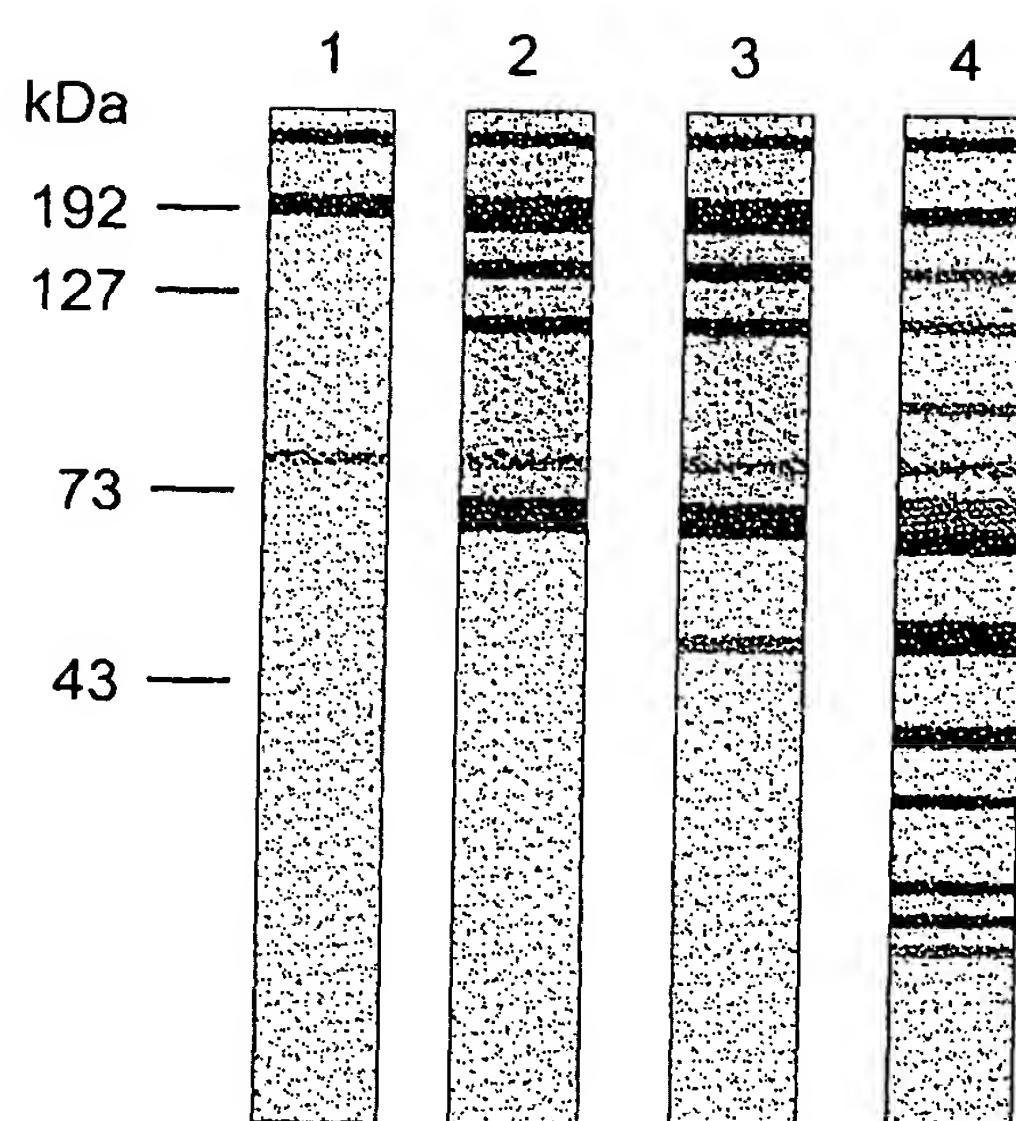


FIG. 10

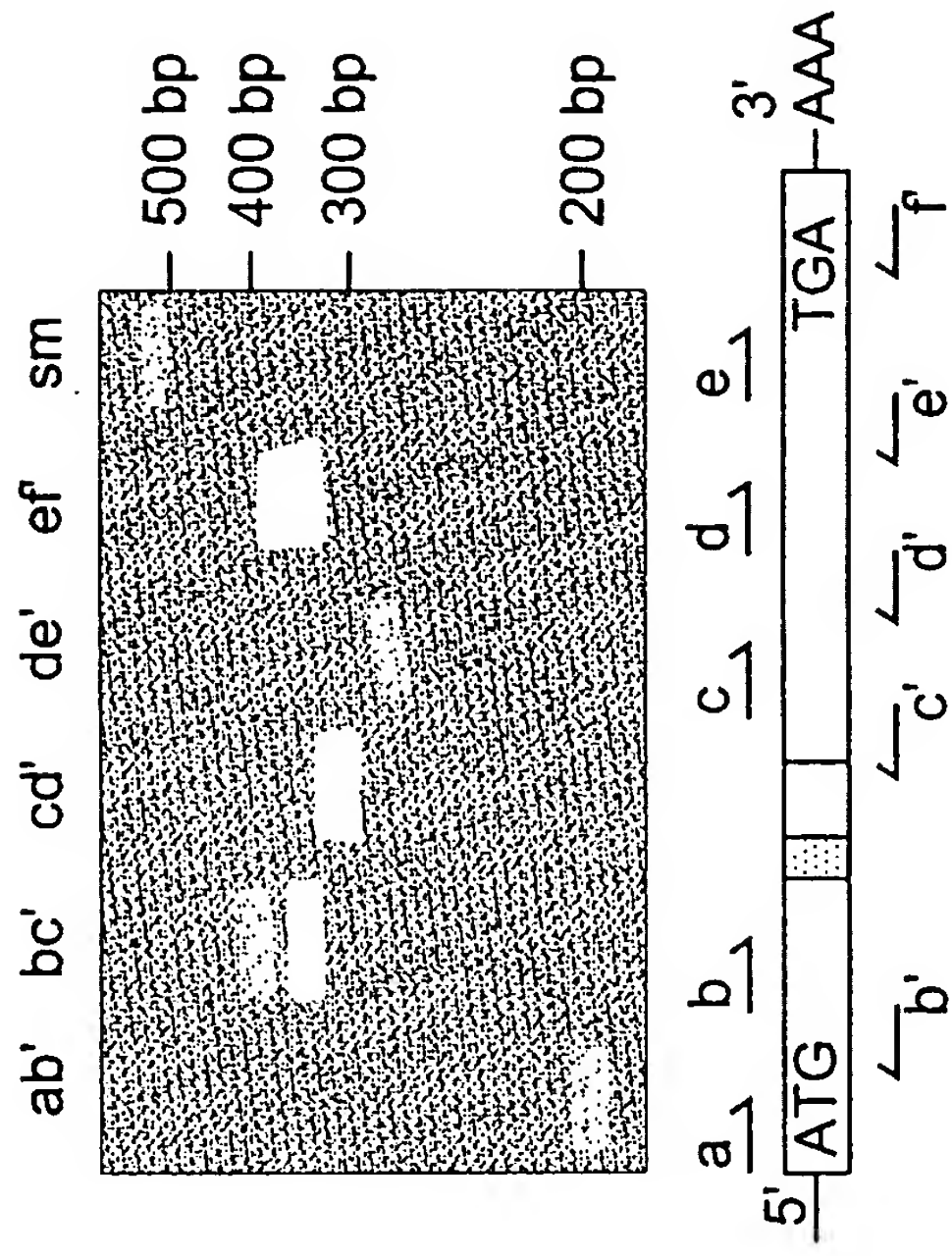


FIG. 11C

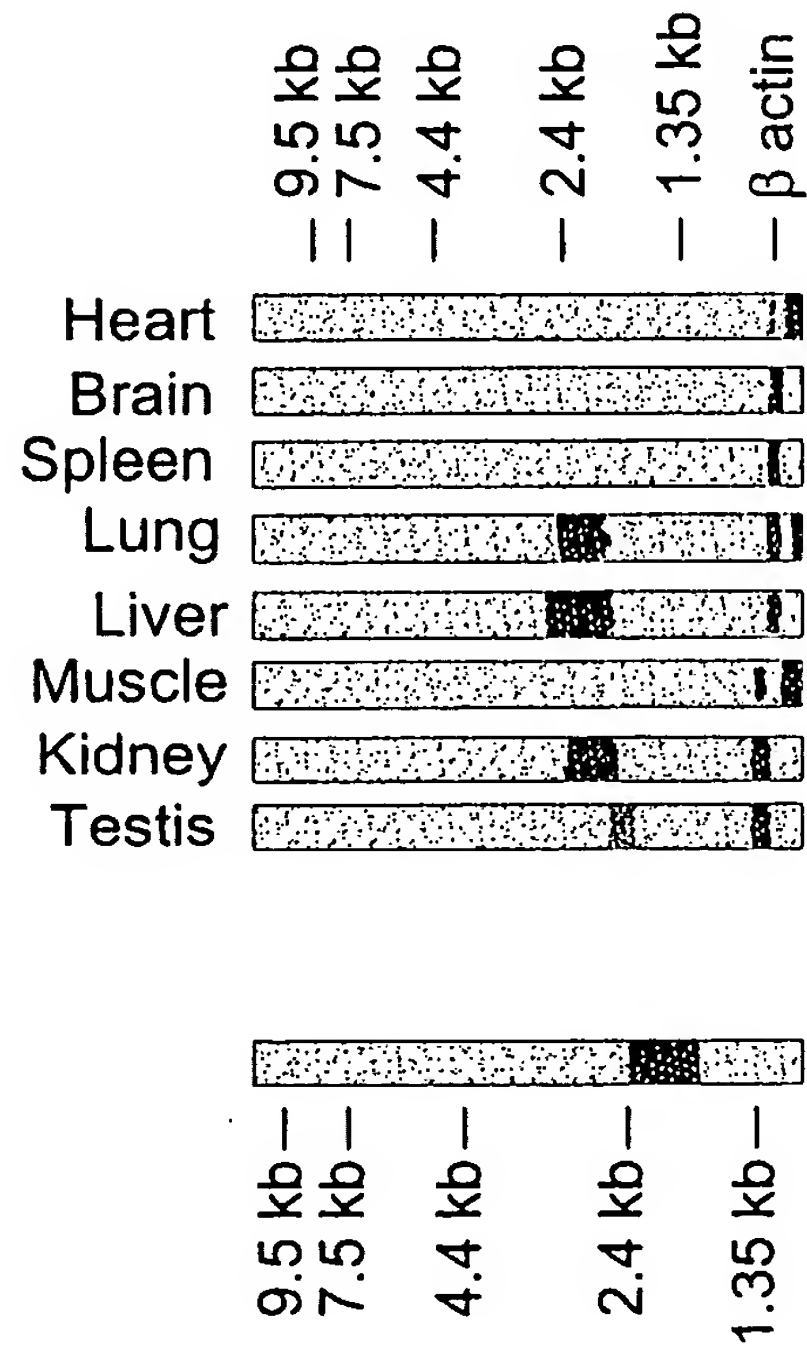
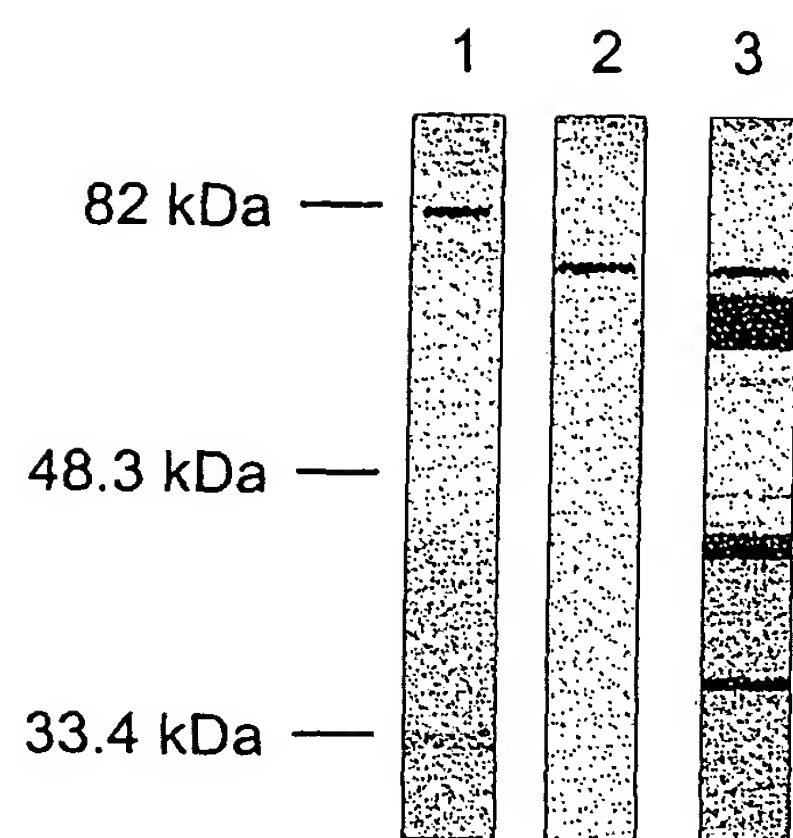


FIG. 11B

FIG. 11A



*FIG. 12*

di - leucine addressing signal

## Hydrophobic regions

**Transmembrane domain**

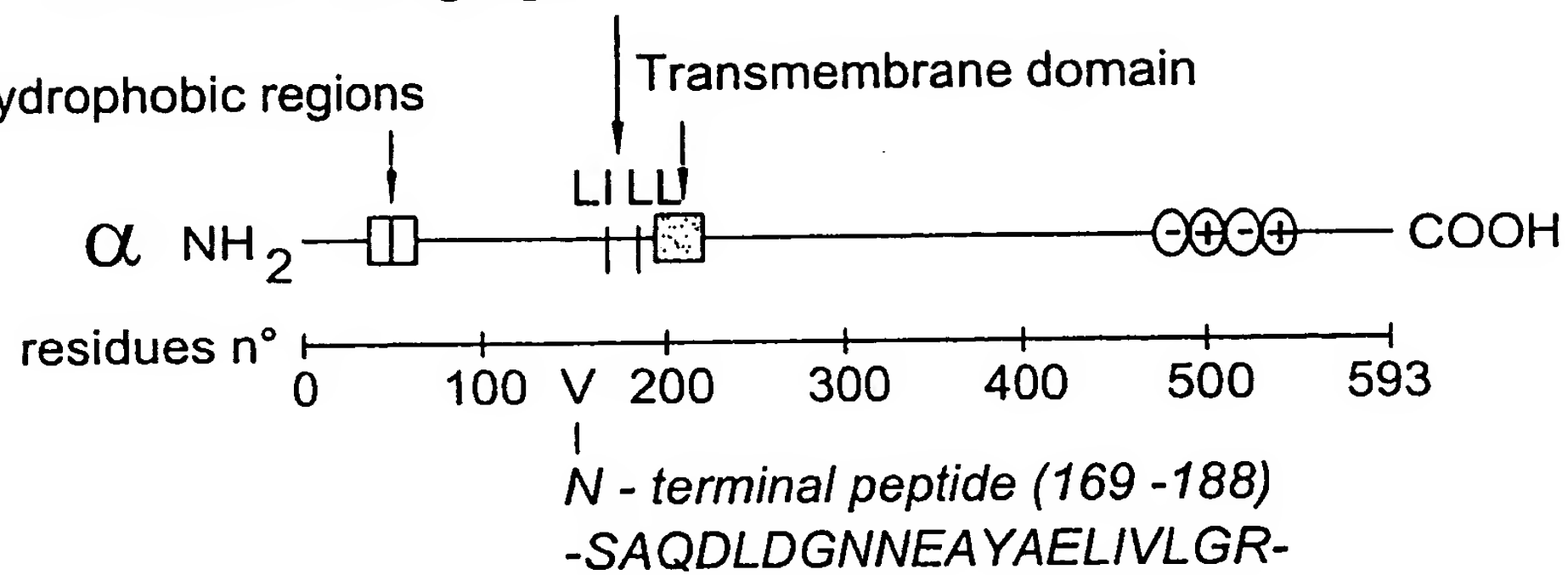


FIG. 13A

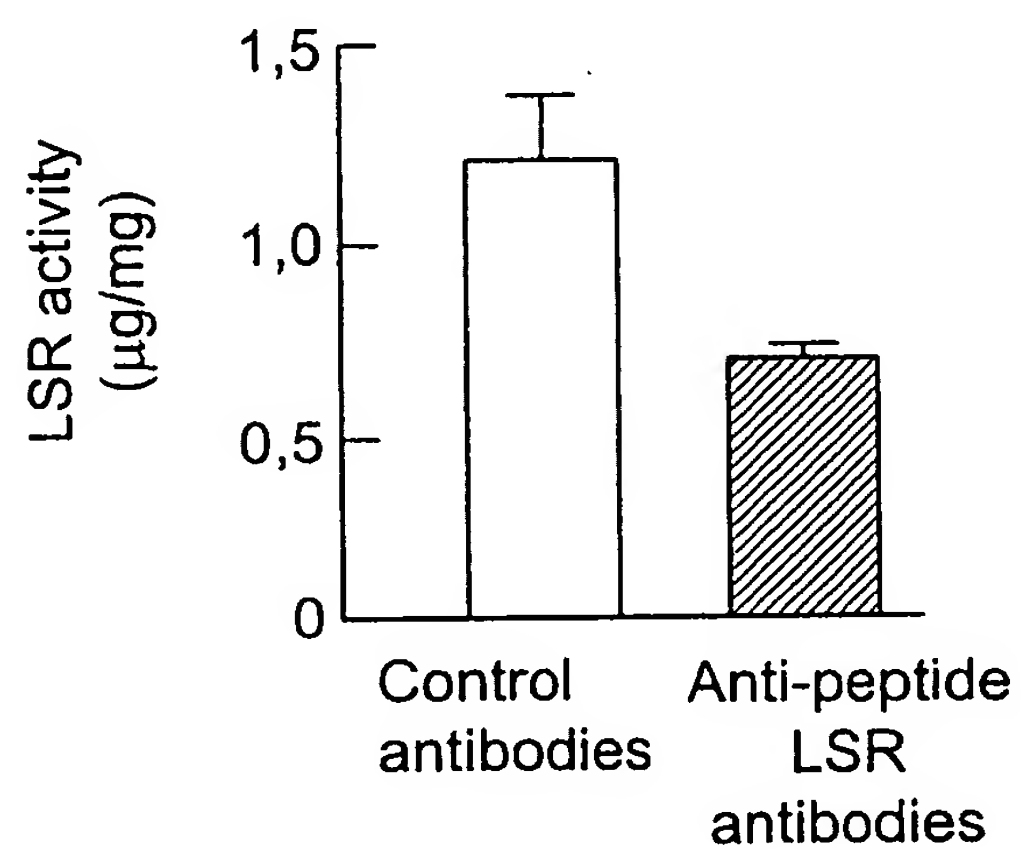


FIG. 13B

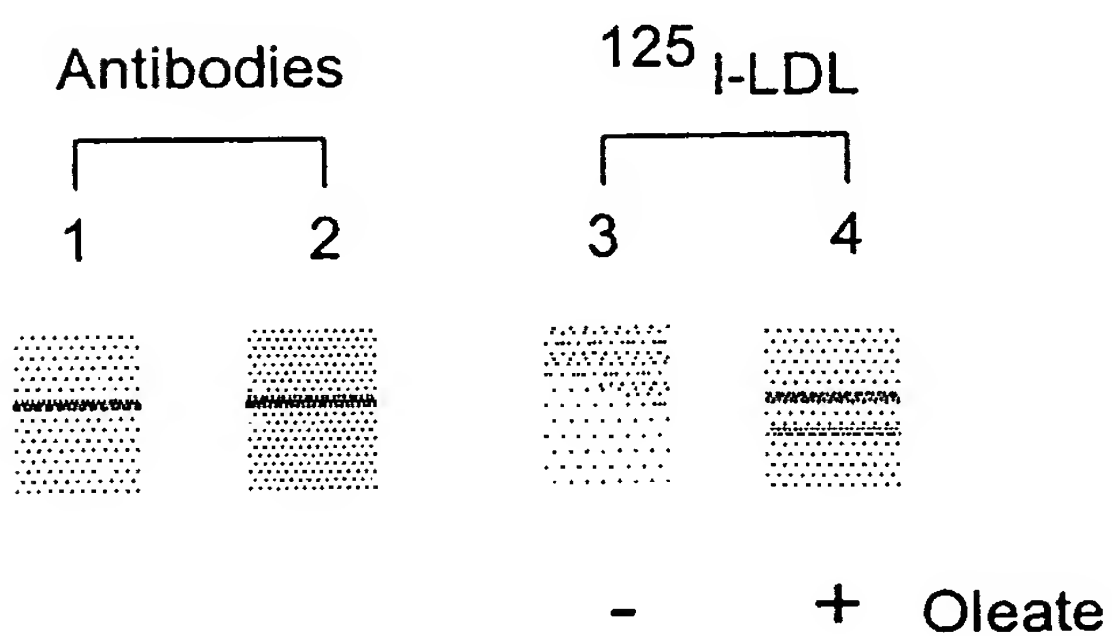
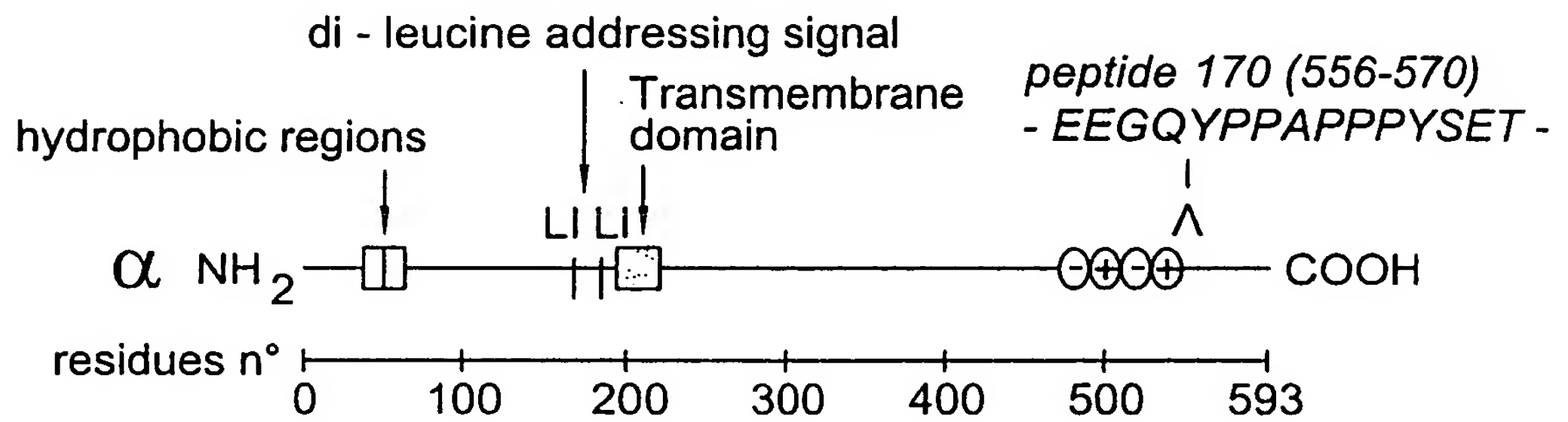
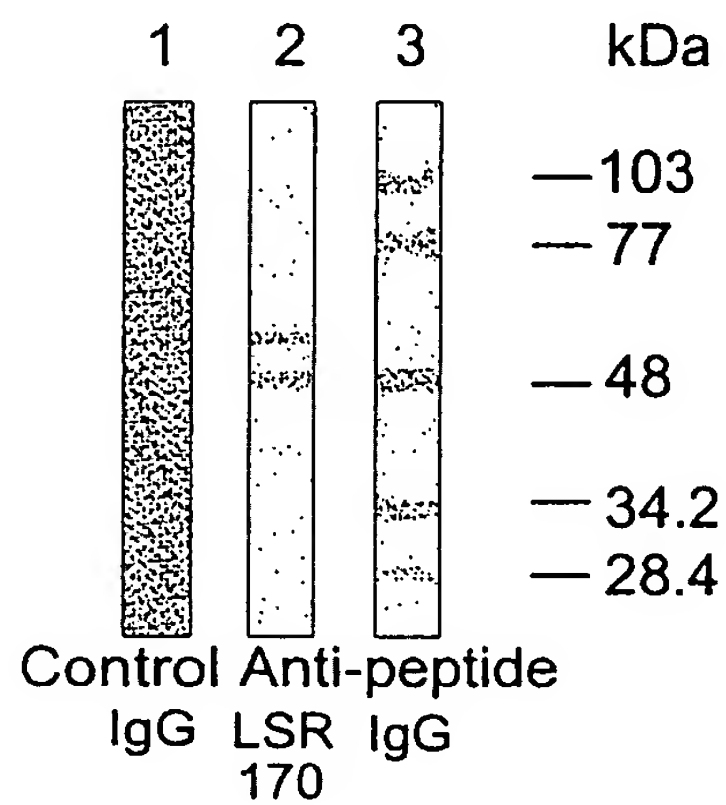


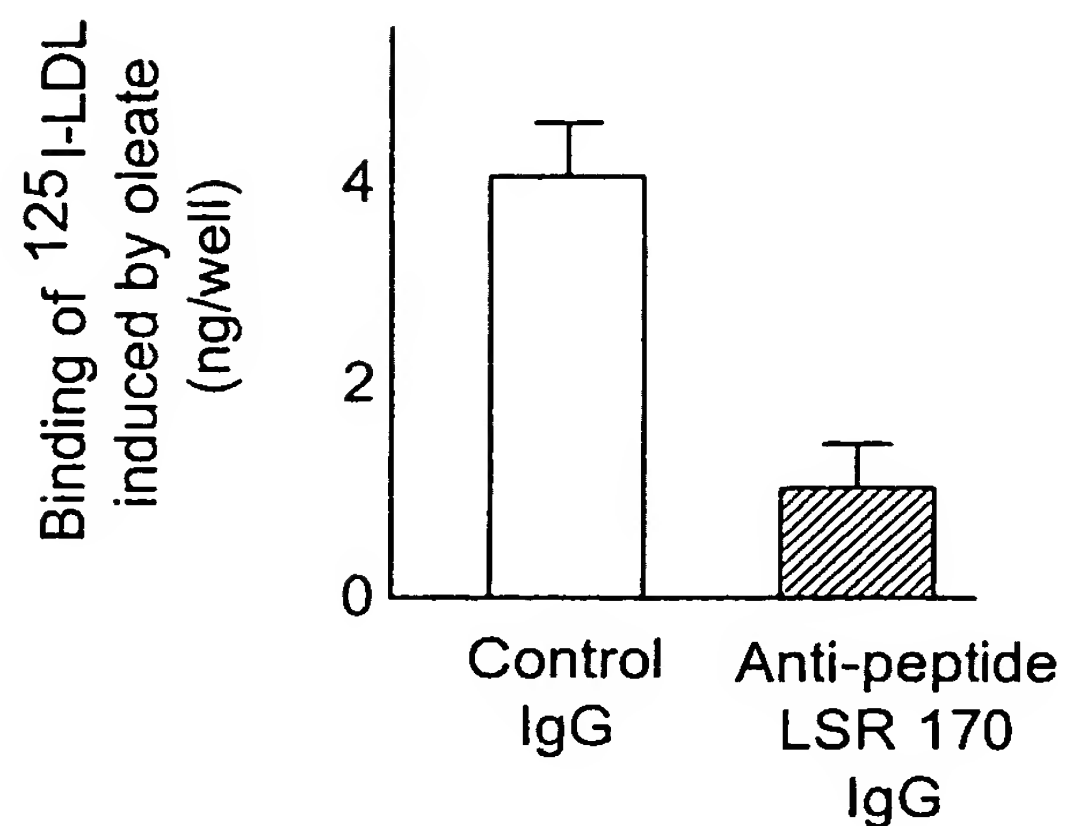
FIG. 13C



*FIG. 14A* Peptide 170



*FIG. 14B* Western



*FIG. 14C* Immunoinhibition



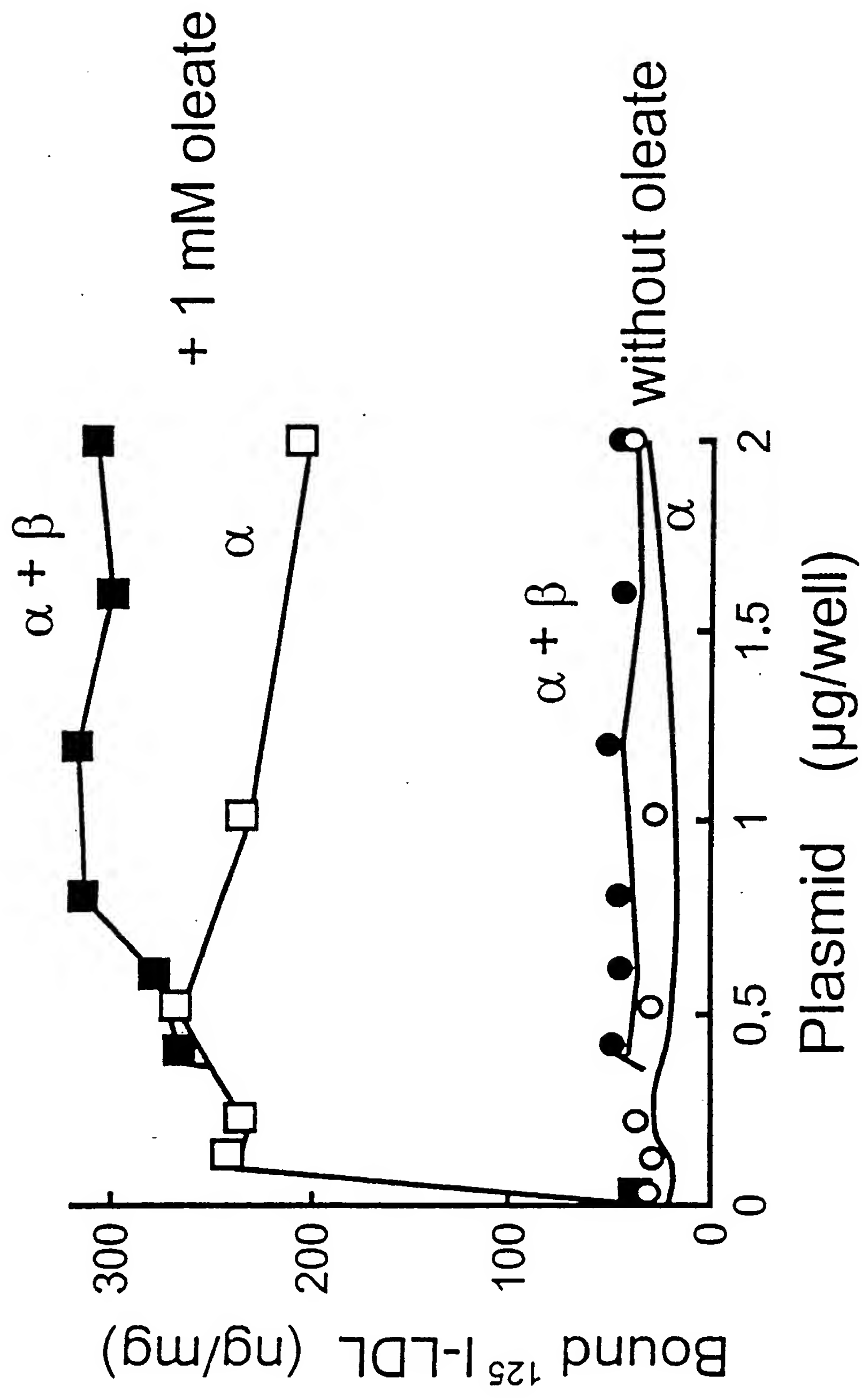


FIG. 15

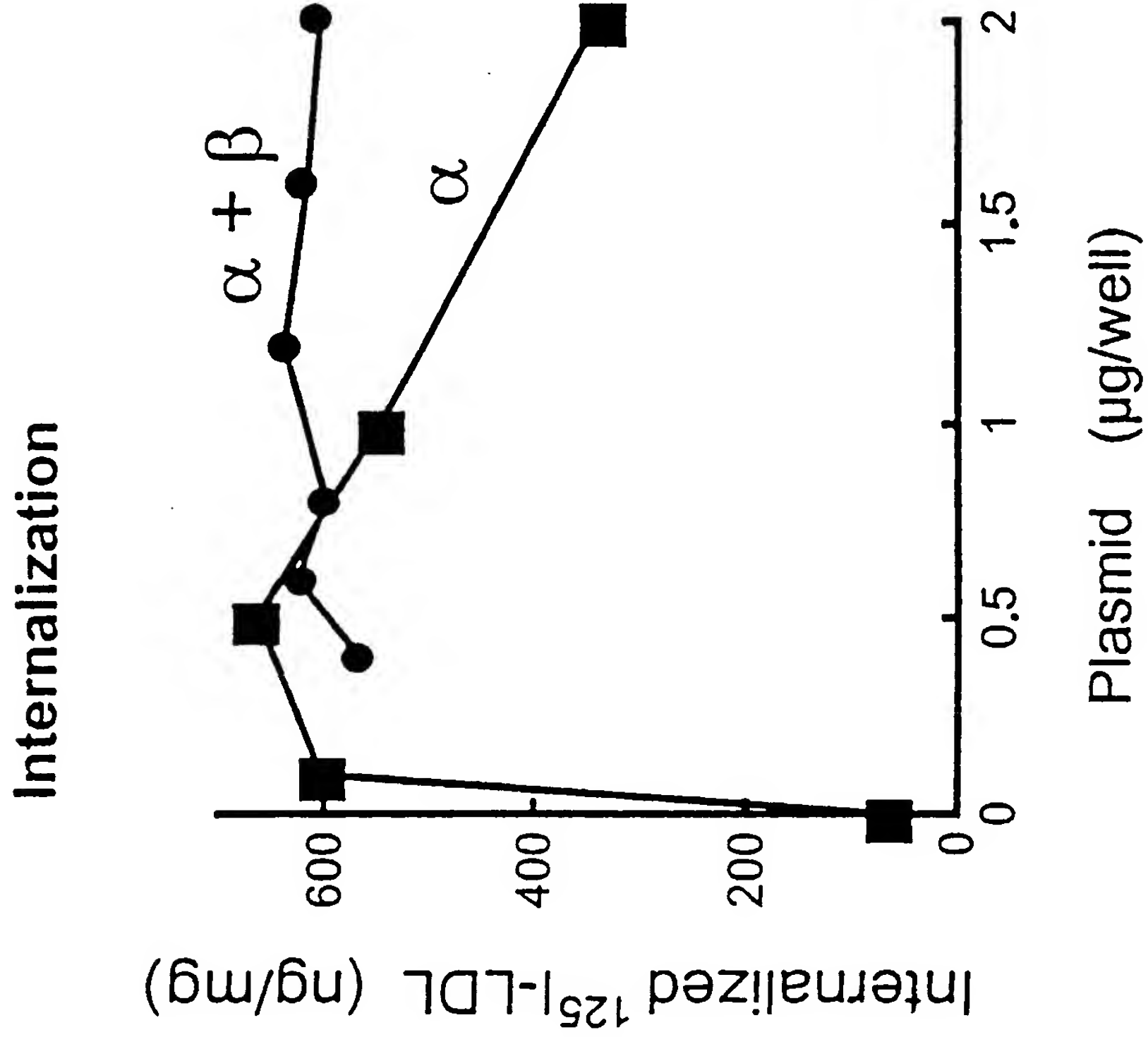


FIG. 16A

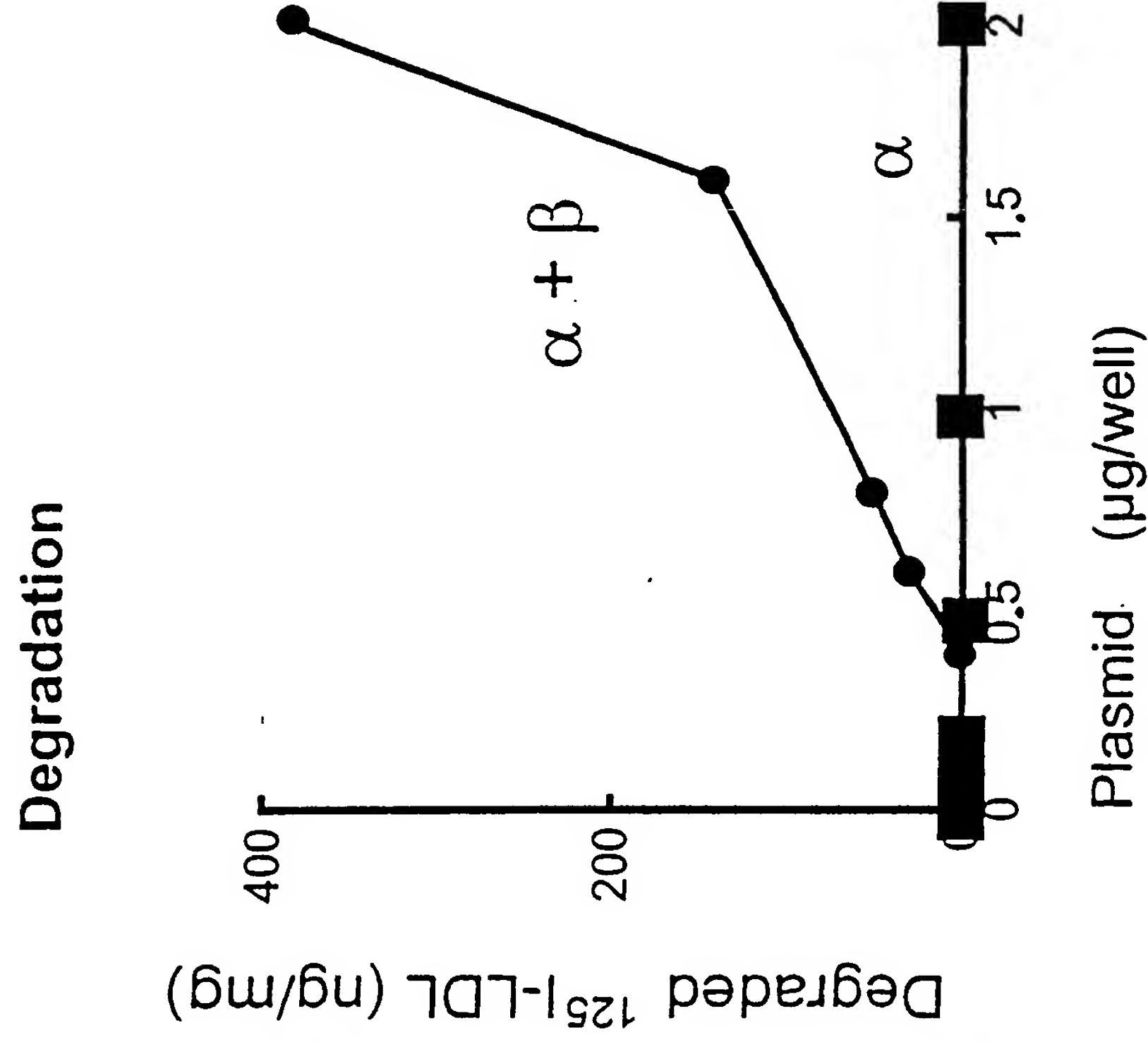


FIG. 16B

Immunoinhibition

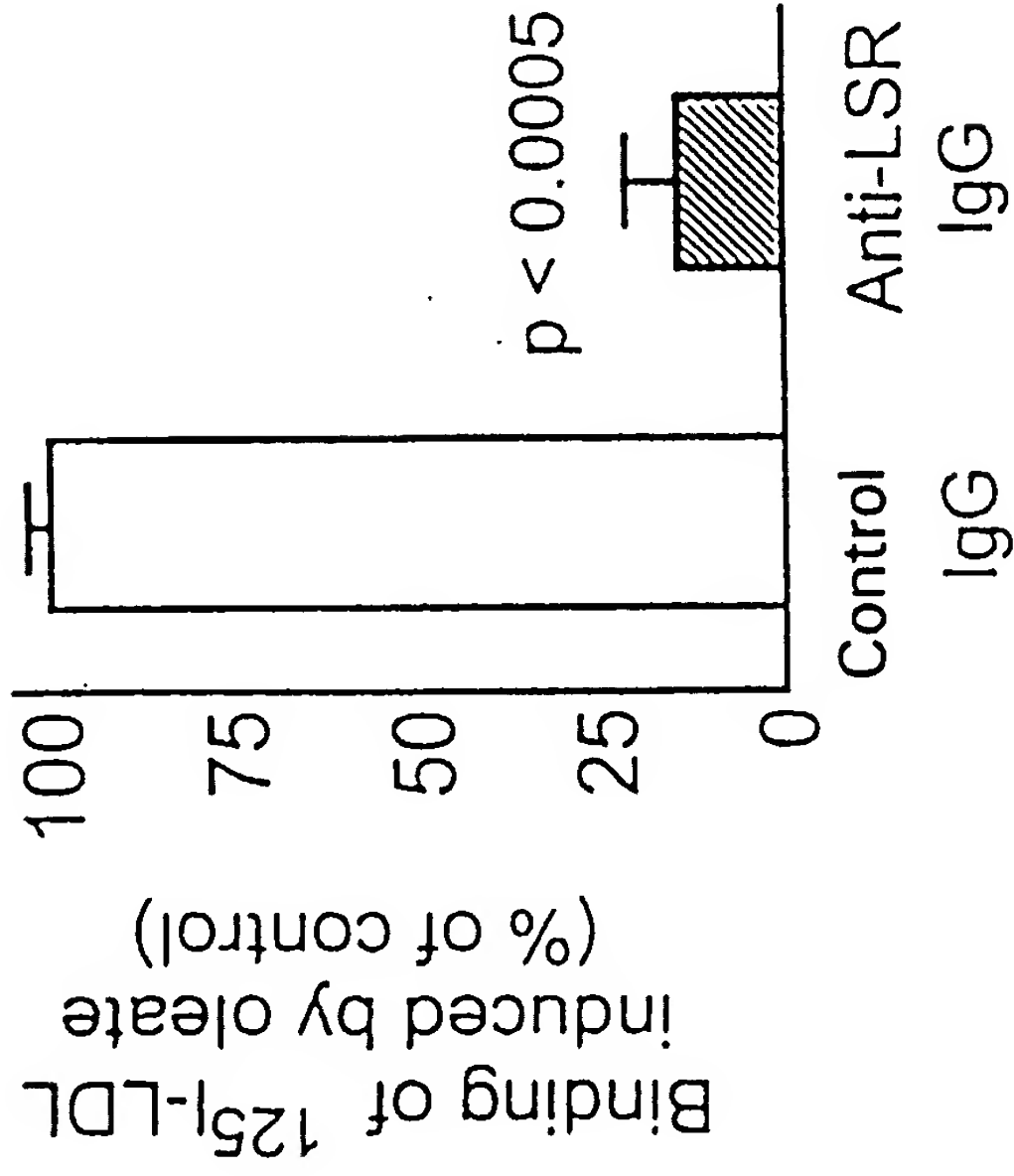


FIG. 17A

Ligand specificity

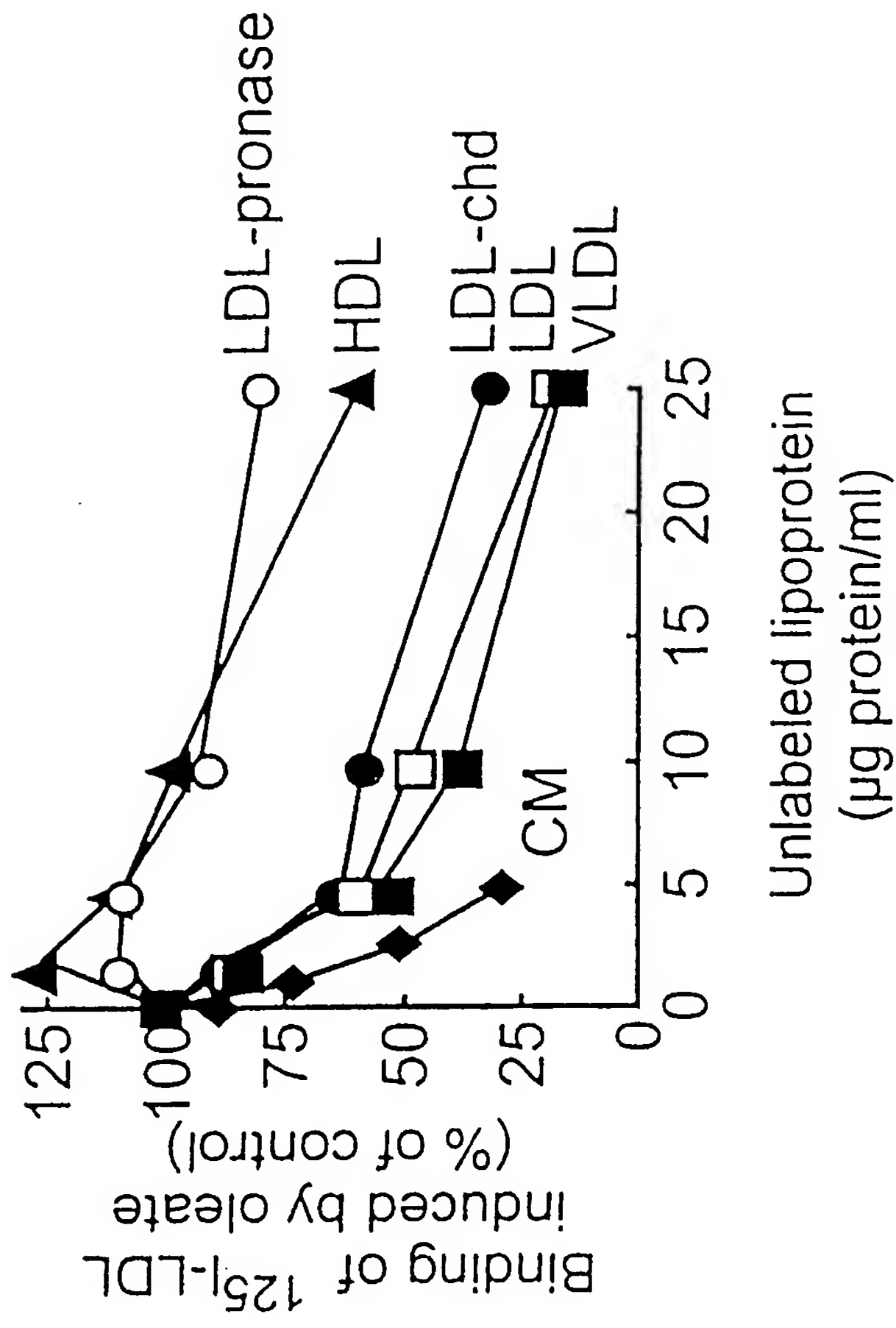
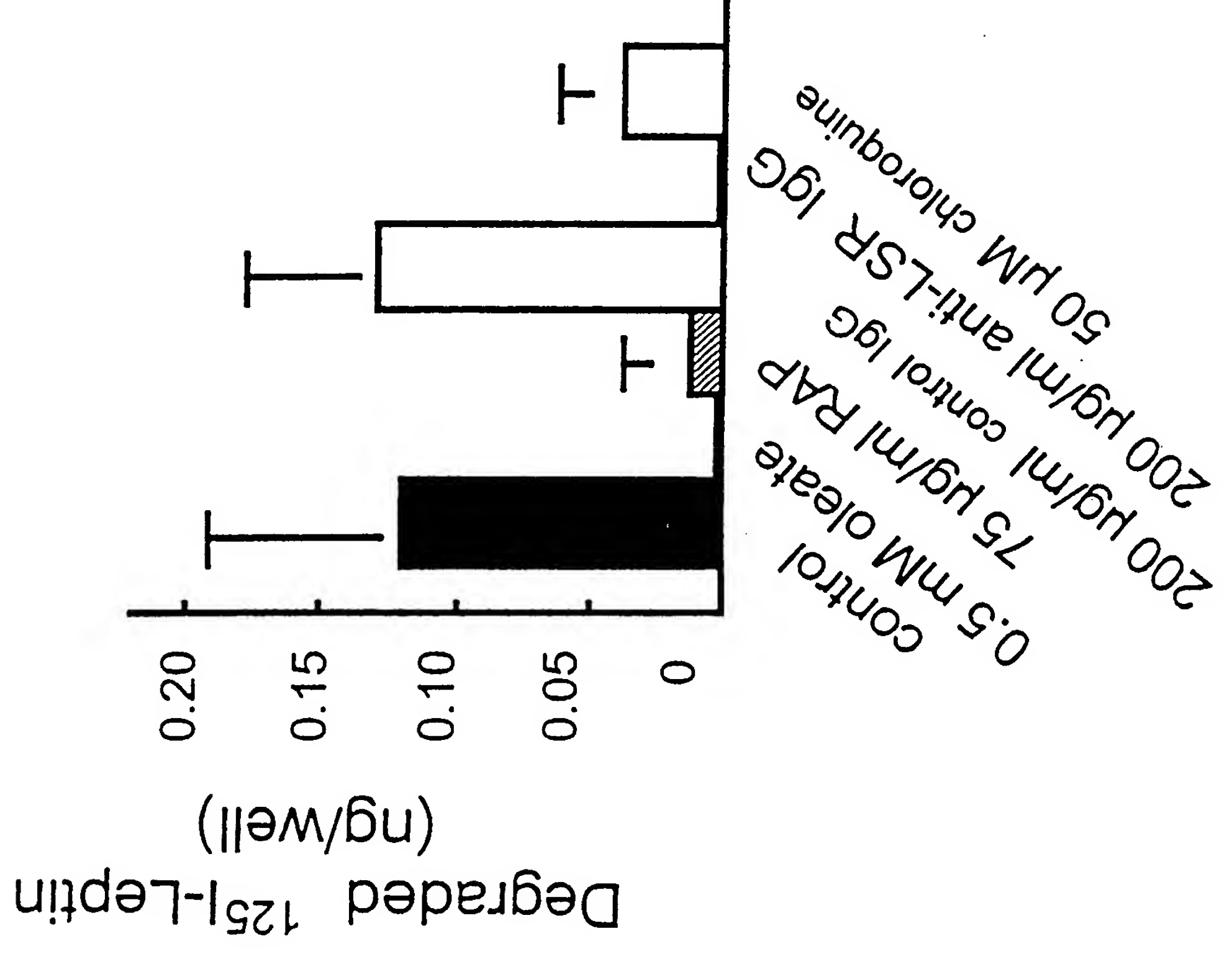
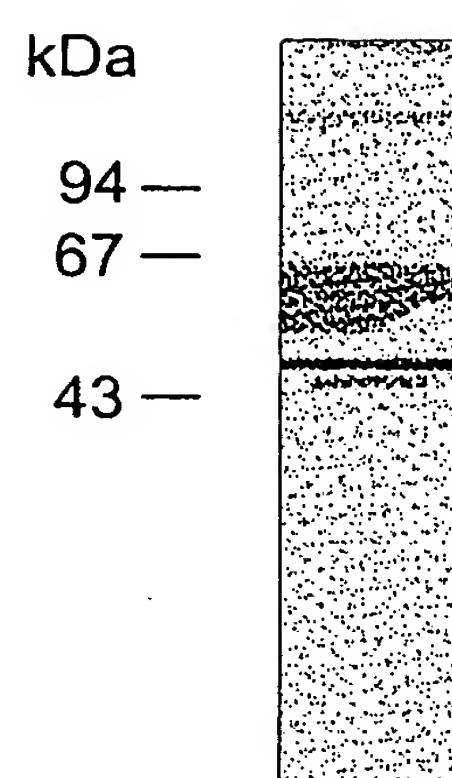


FIG. 17B

FIG. 18





*FIG. 19*

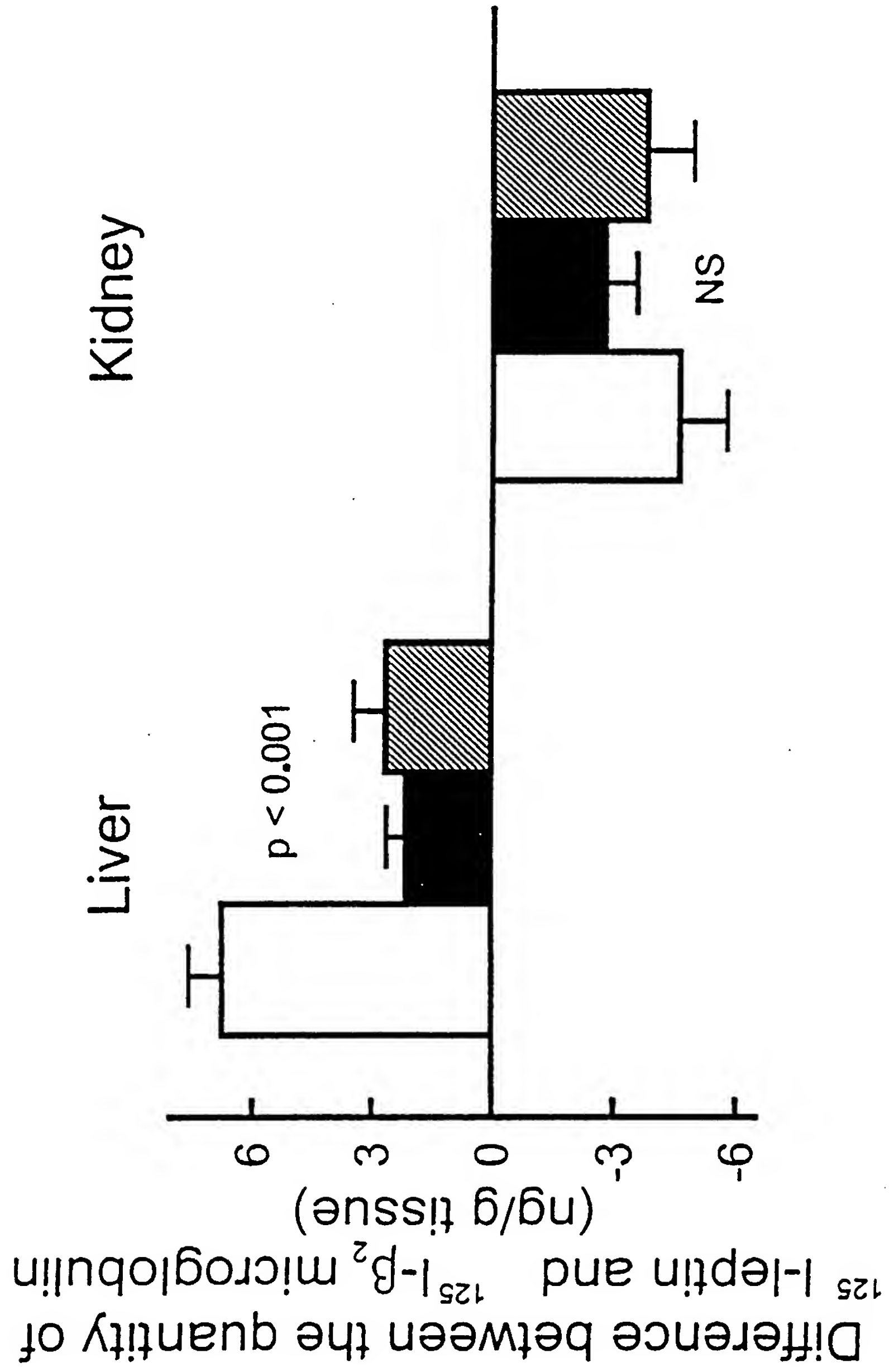


FIG. 20

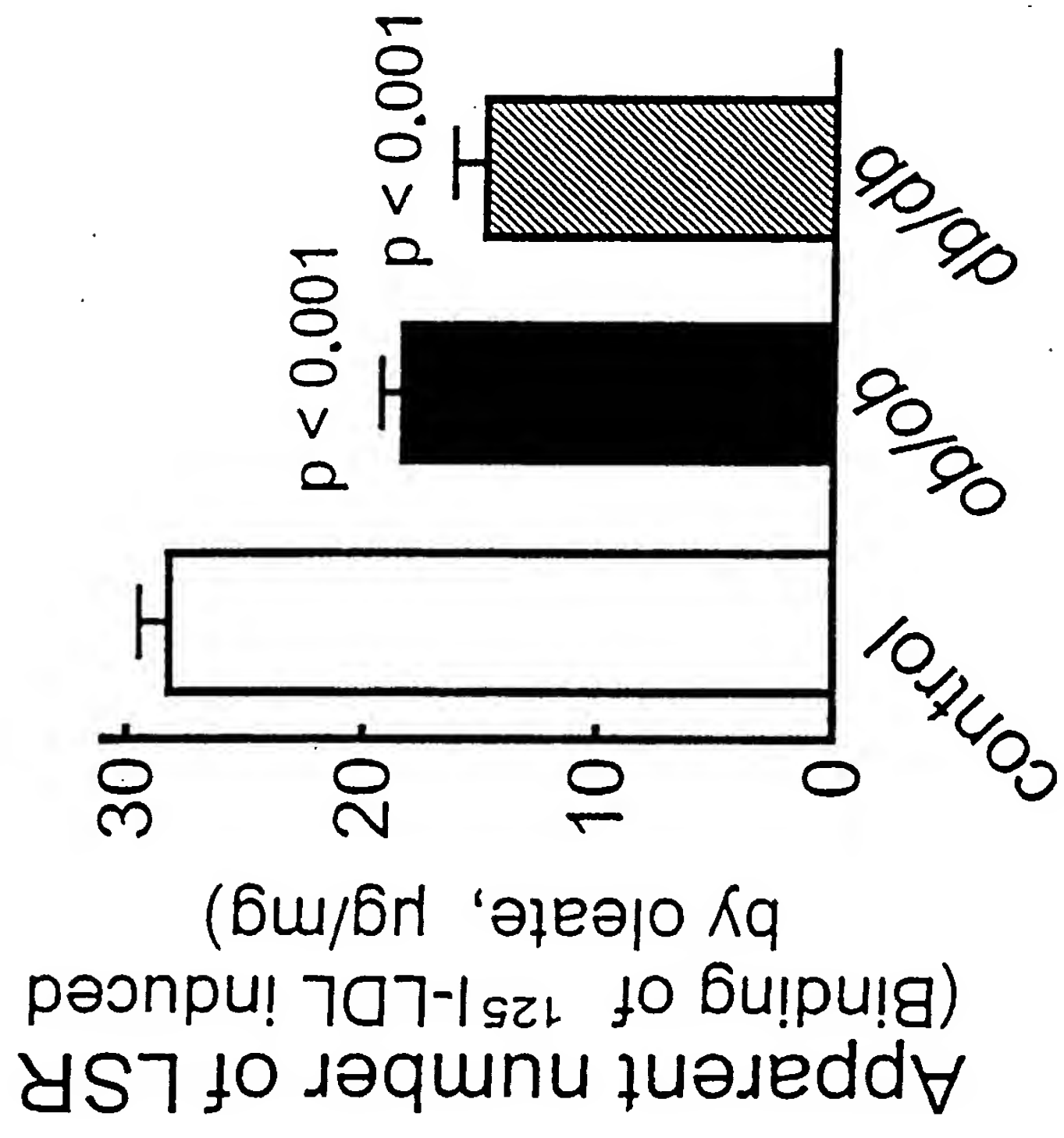


FIG. 21



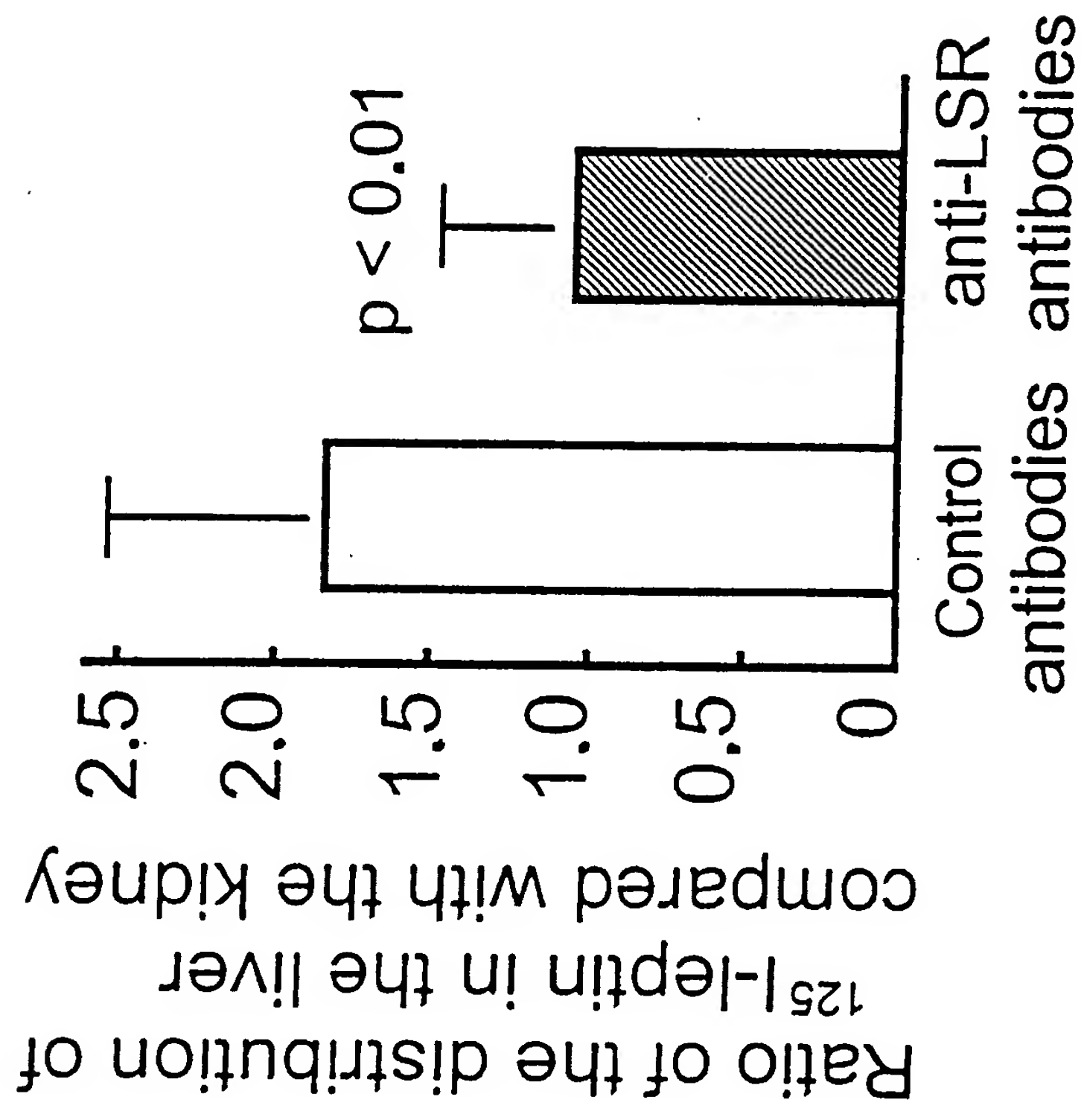


FIG. 22

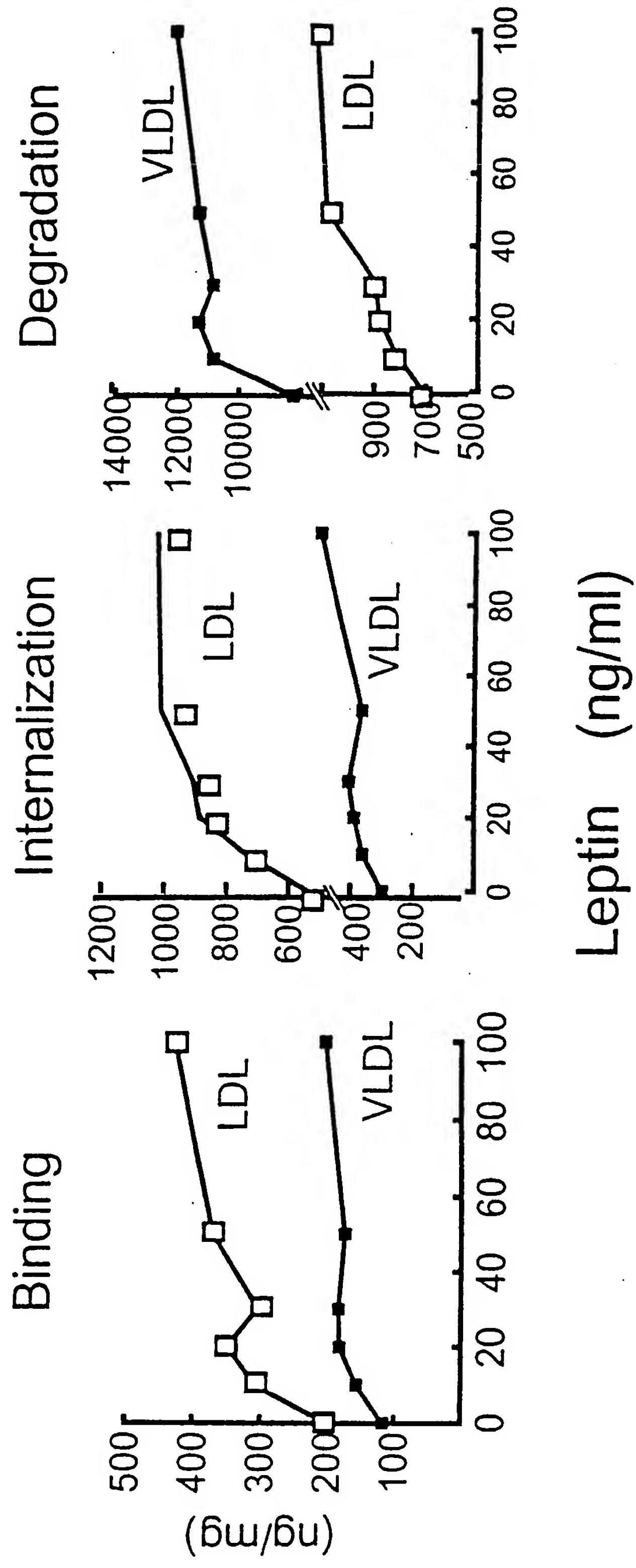


FIG. 23

FIG. 24A

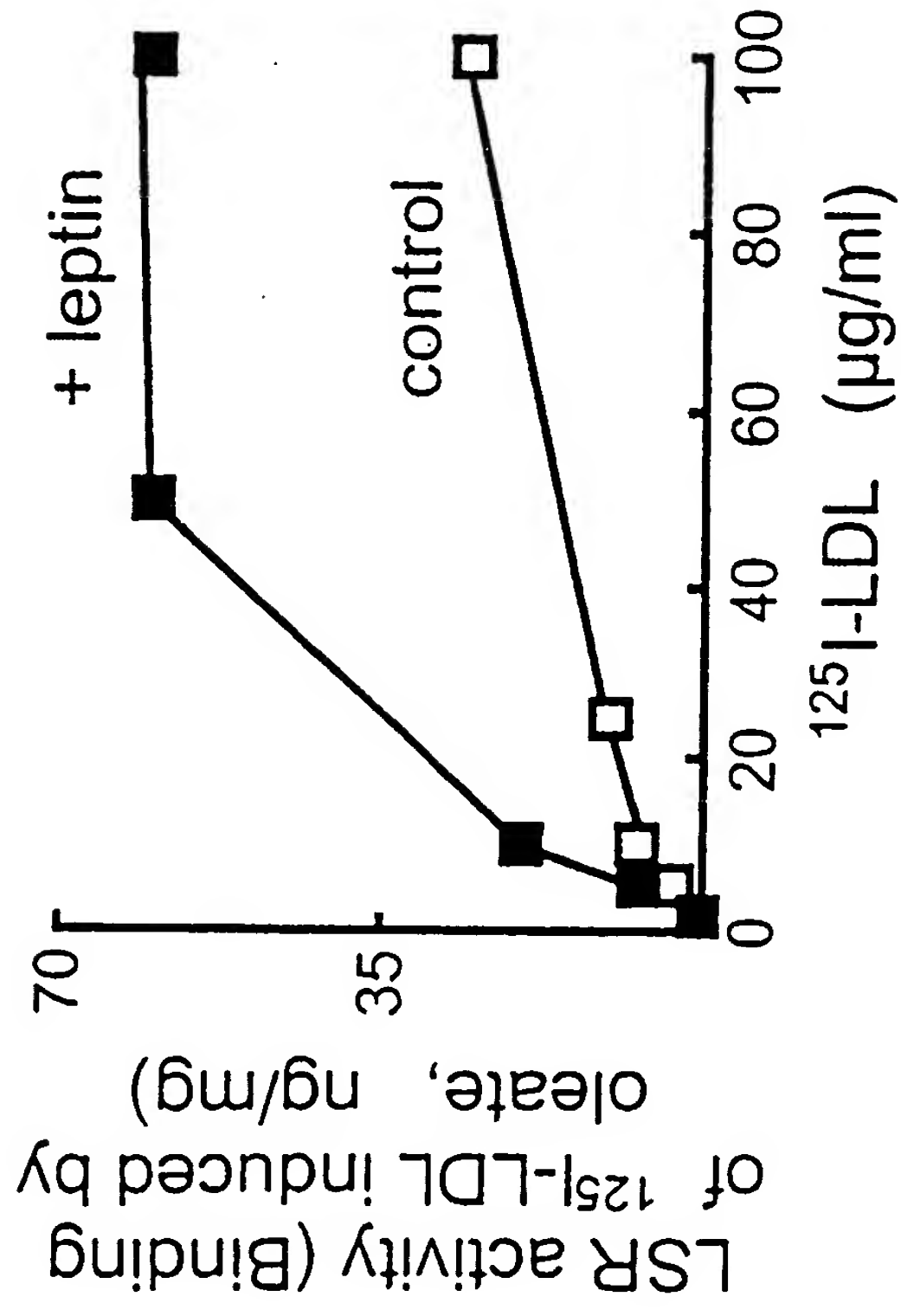
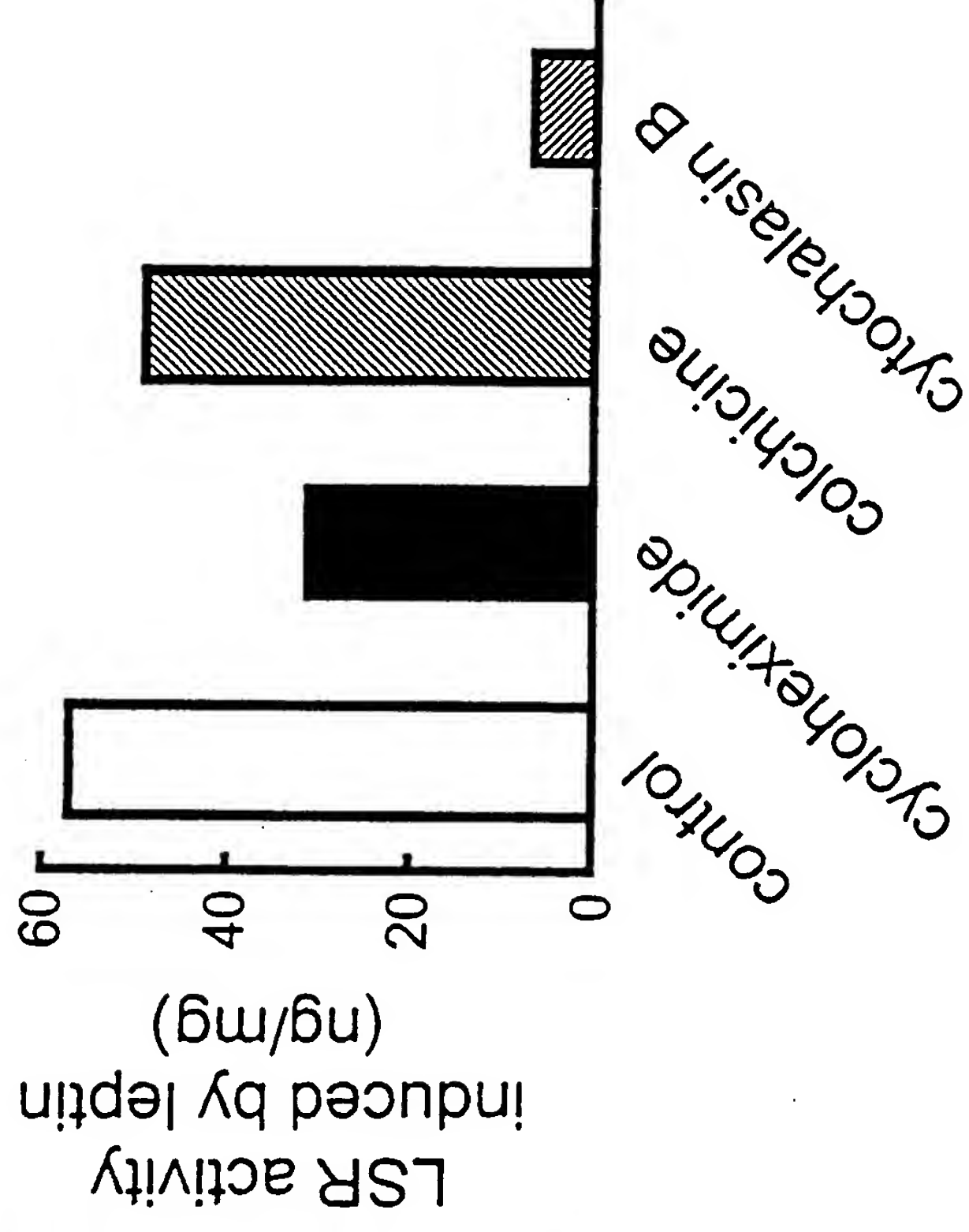


FIG. 24B



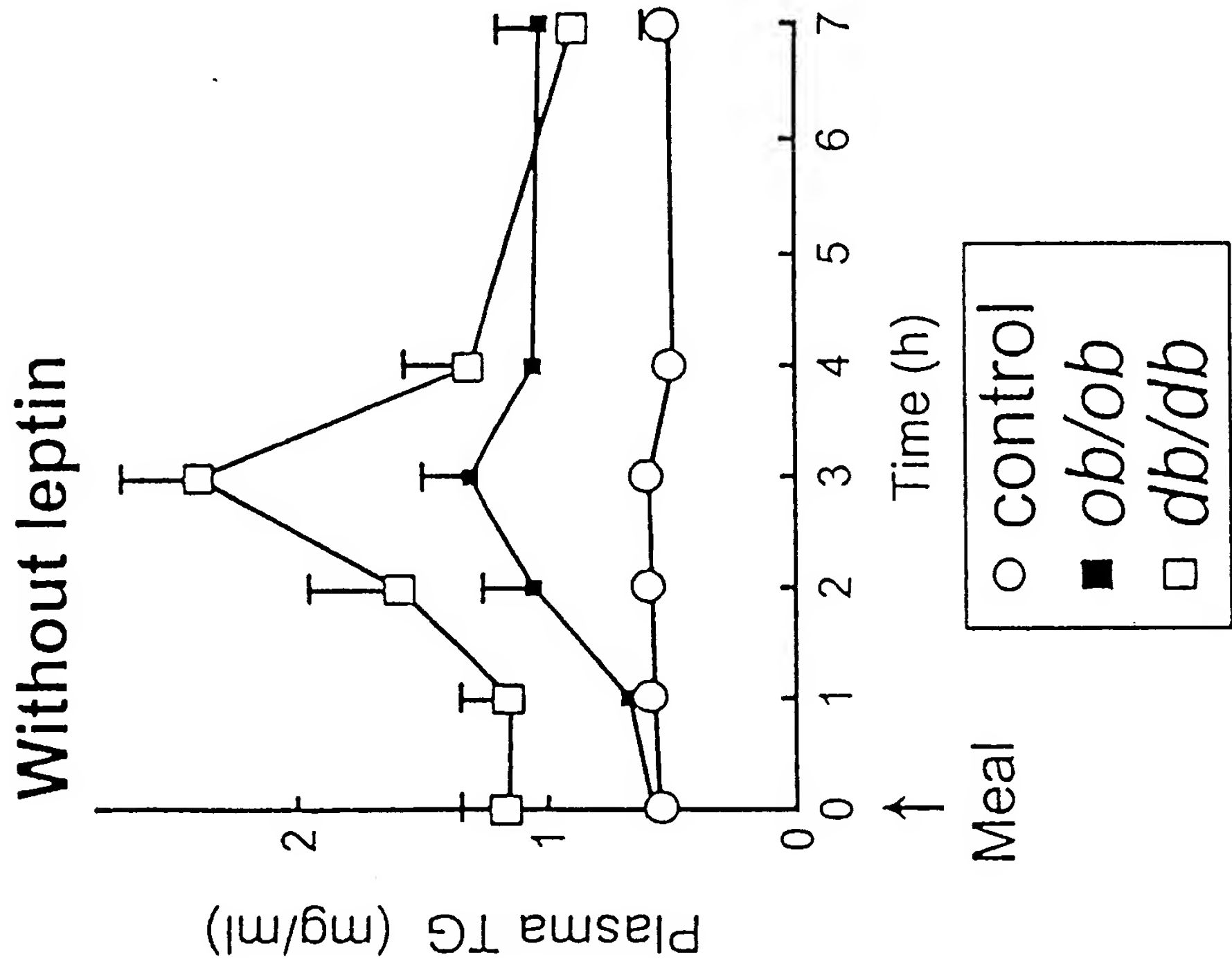


FIG. 25A

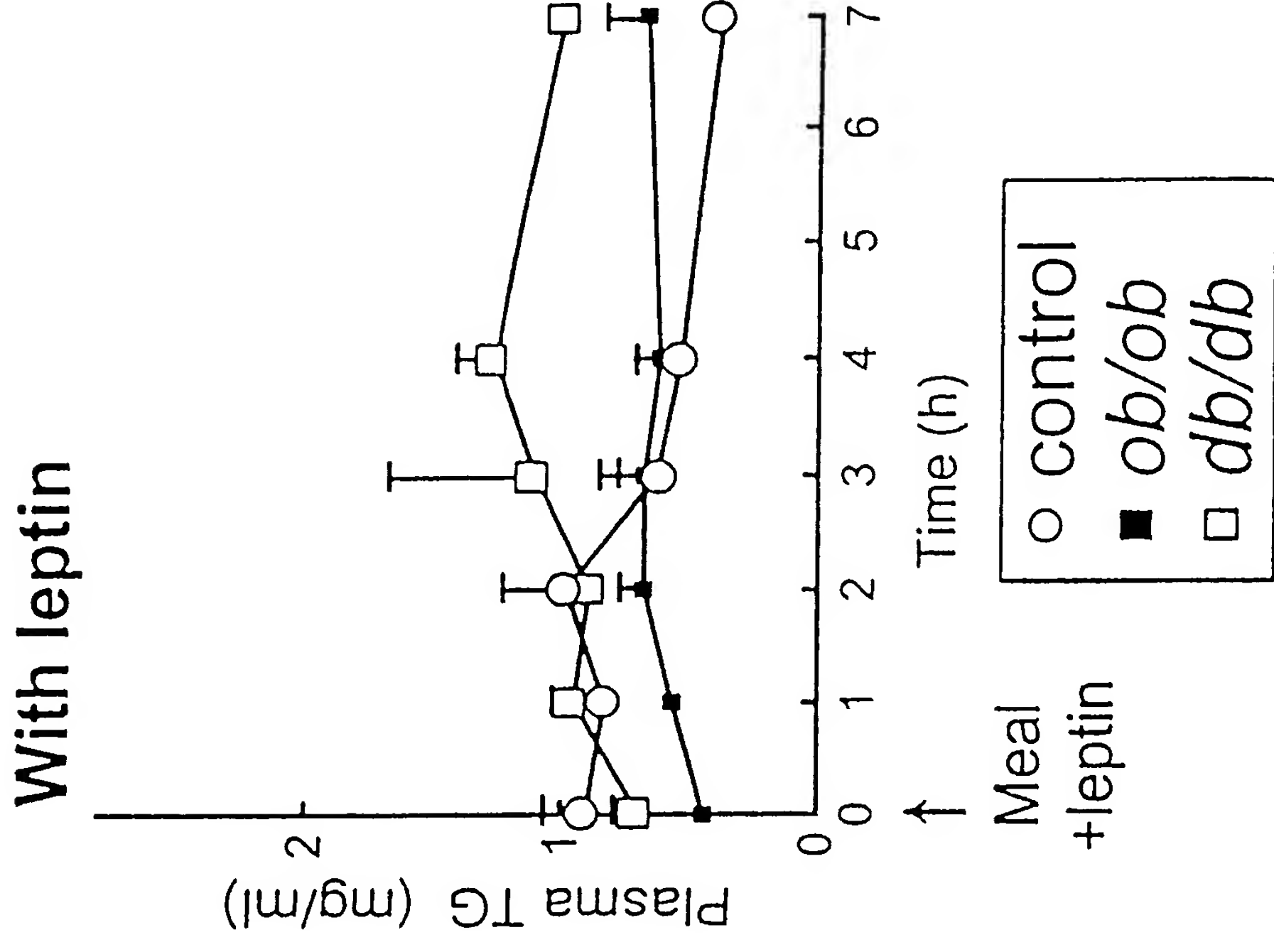


FIG. 25B

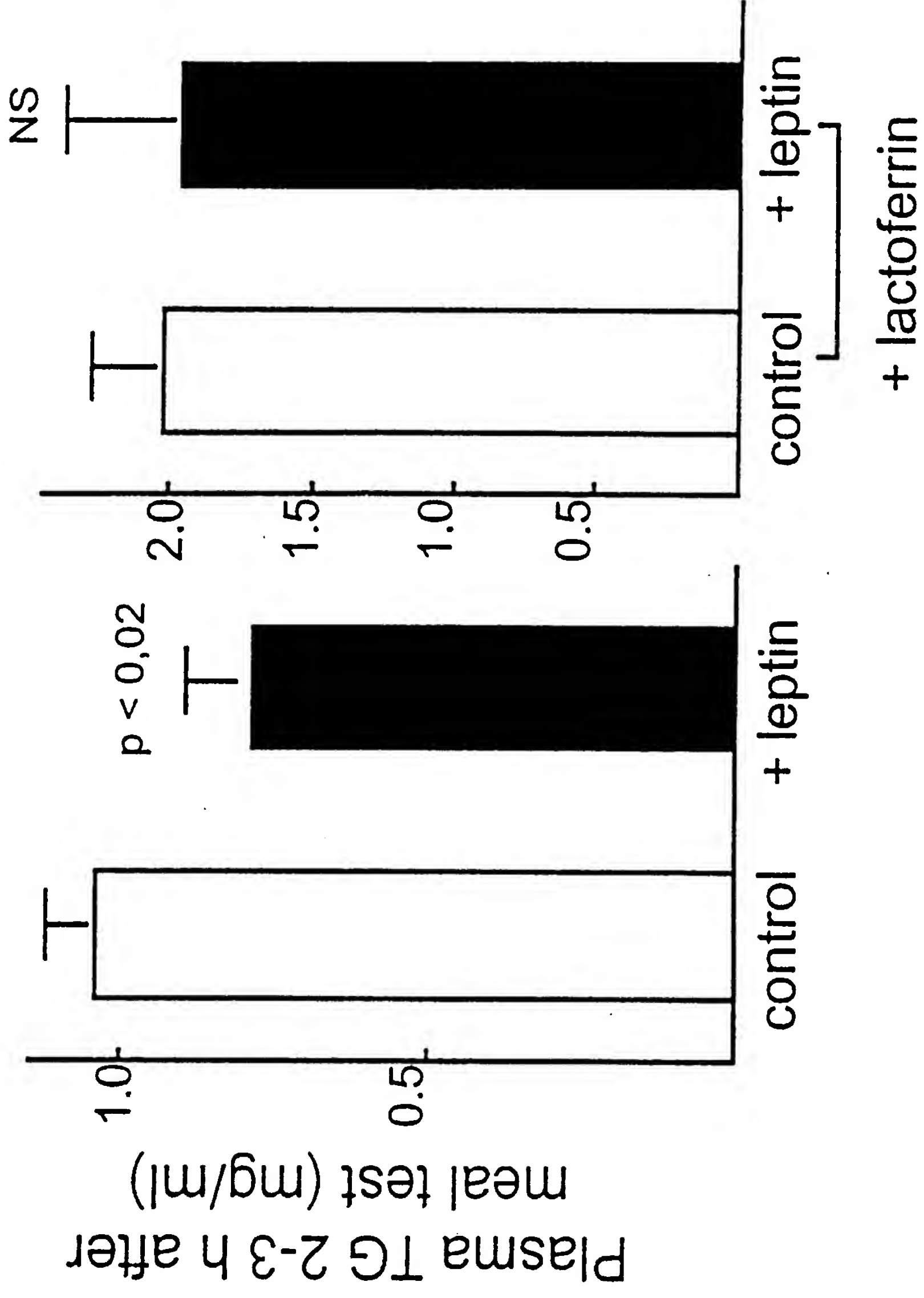


FIG. 26

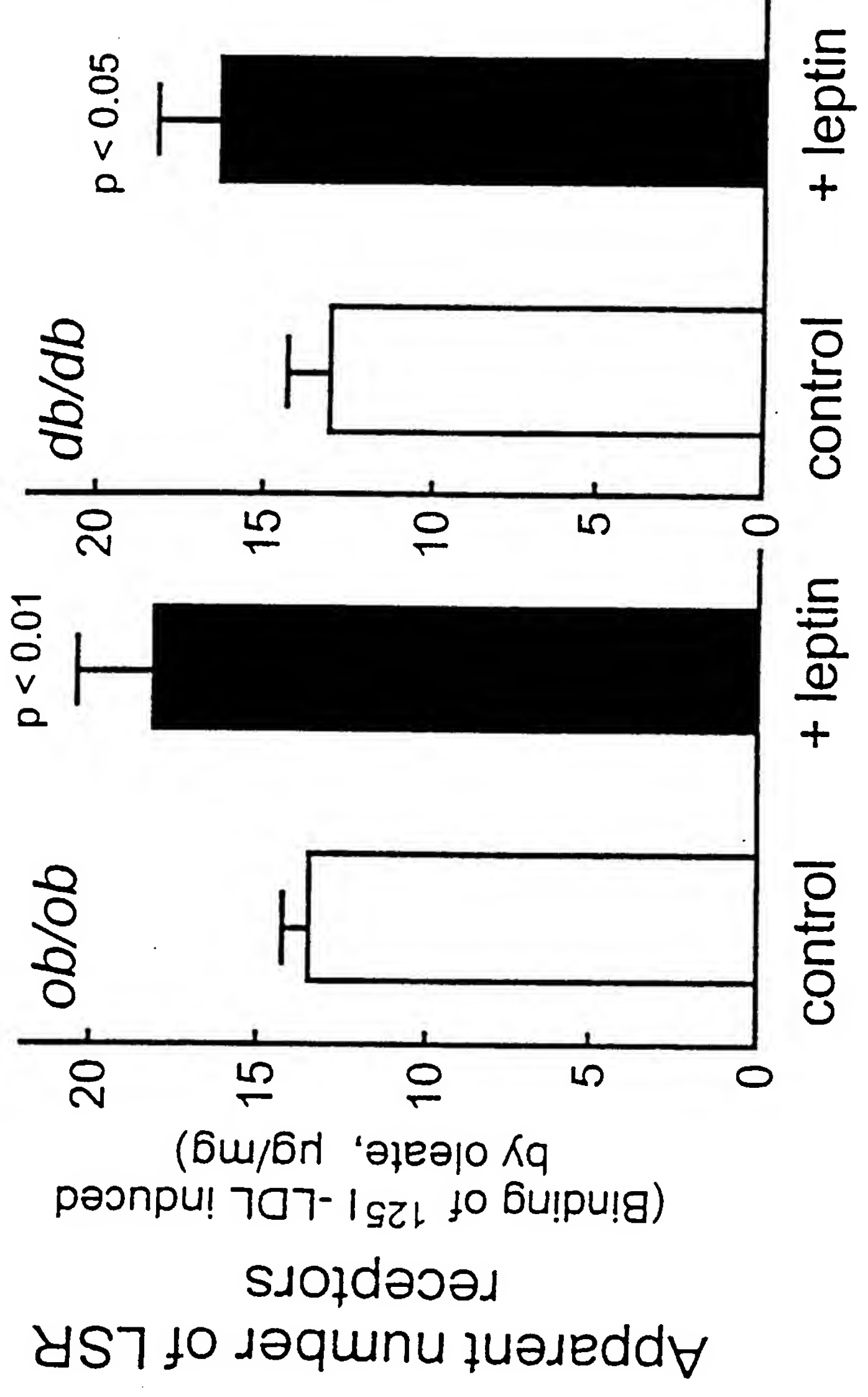


FIG. 27

FIG. 28A Weight

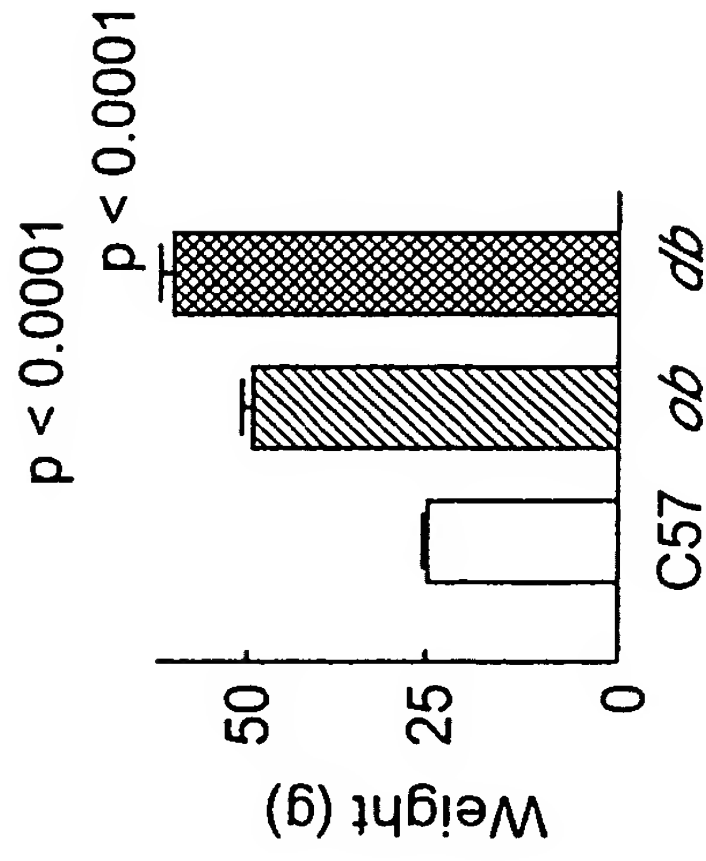


FIG. 28B

Postprandial lipemic response

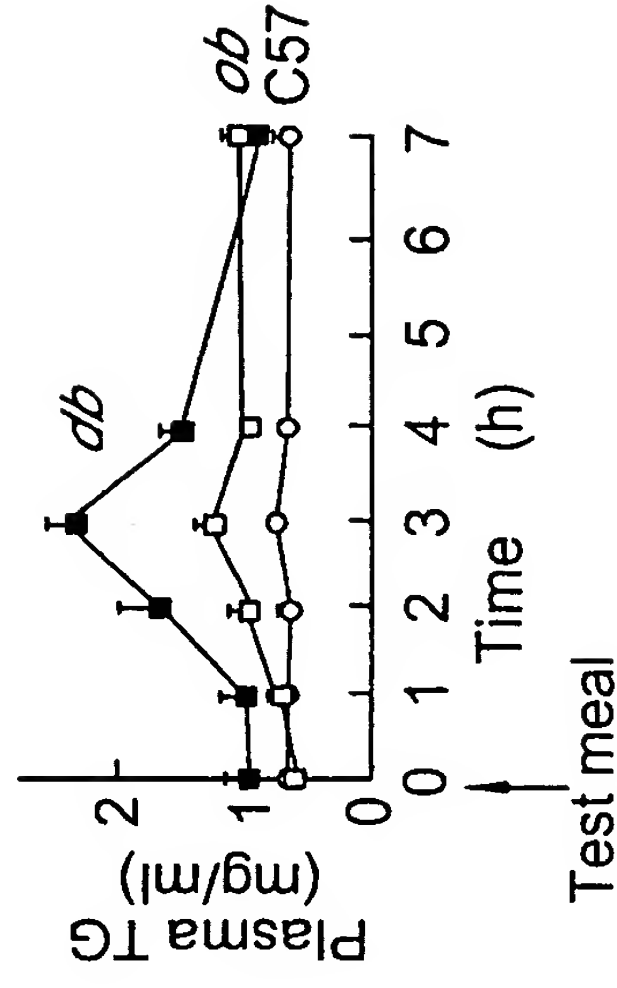


FIG. 28C

LSR activity

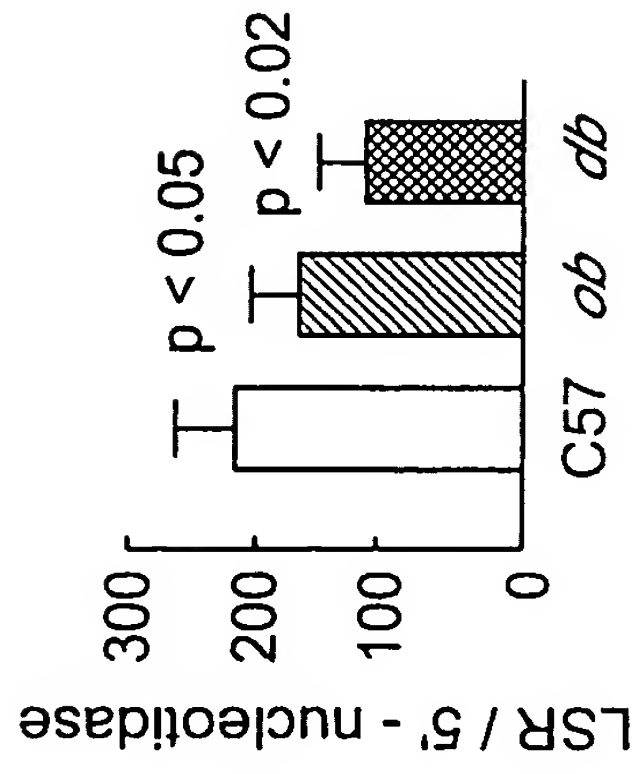


FIG. 28D

Northern blot

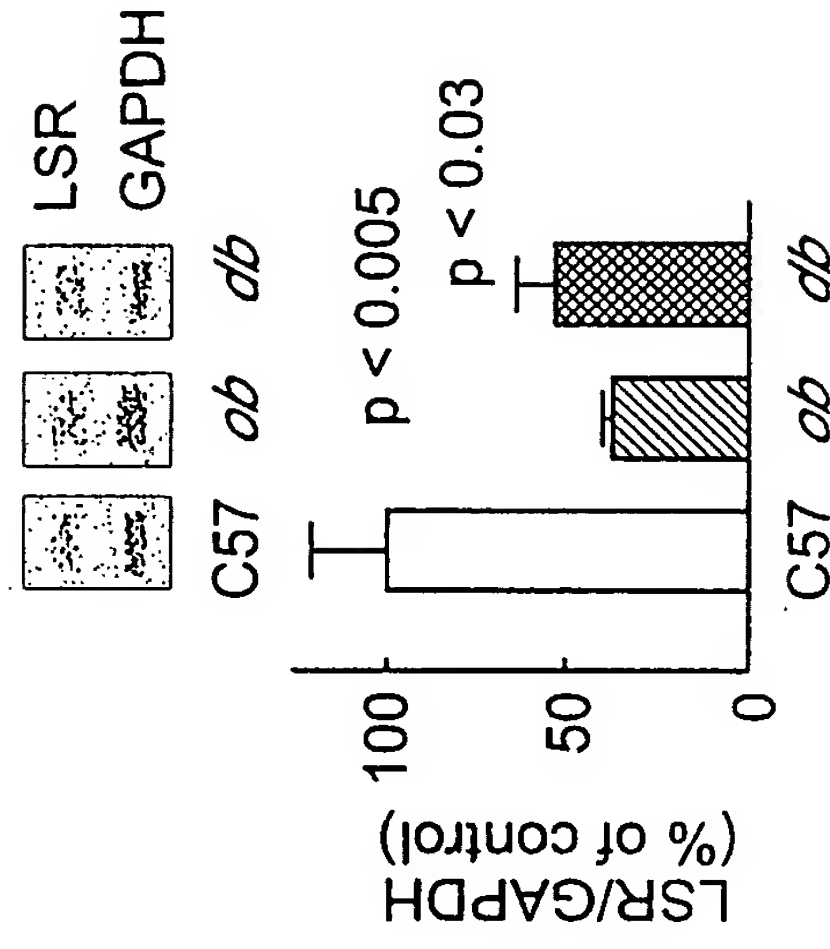




FIG. 29A Weight

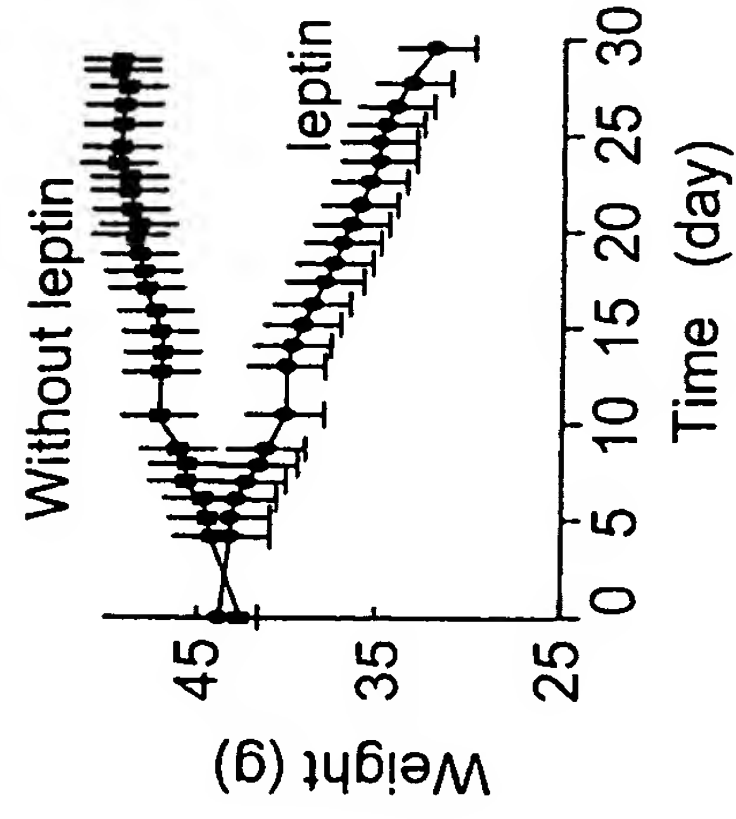


FIG. 29C LSR activity

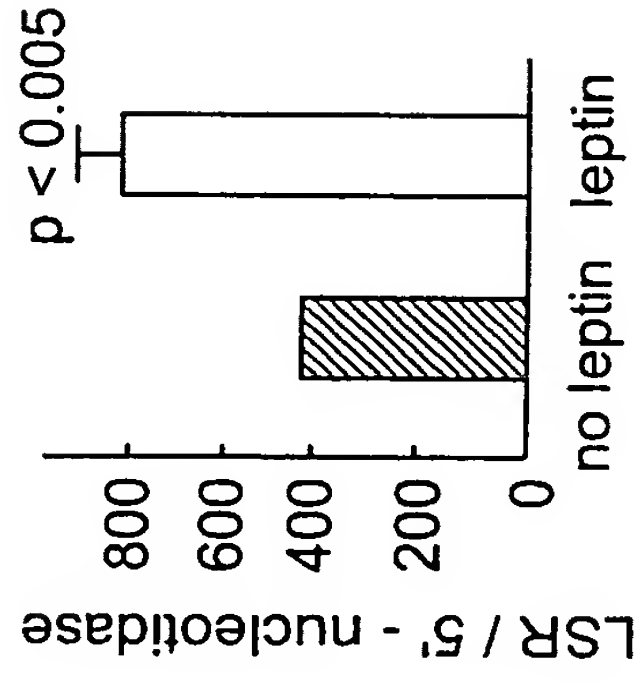


FIG. 29B

Postprandial lipemic response

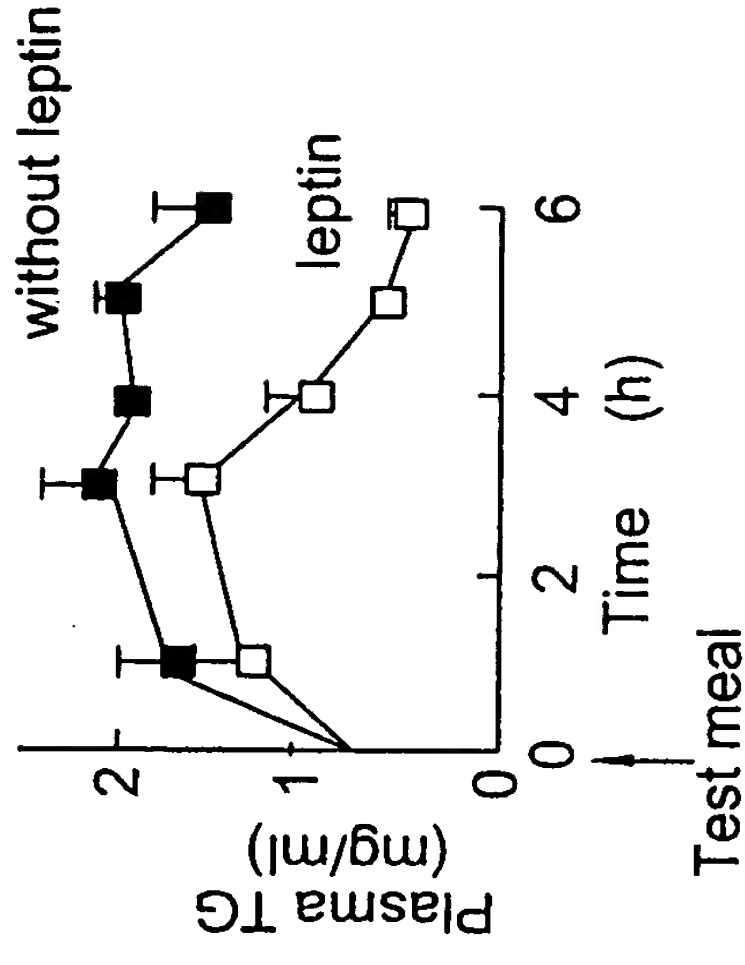
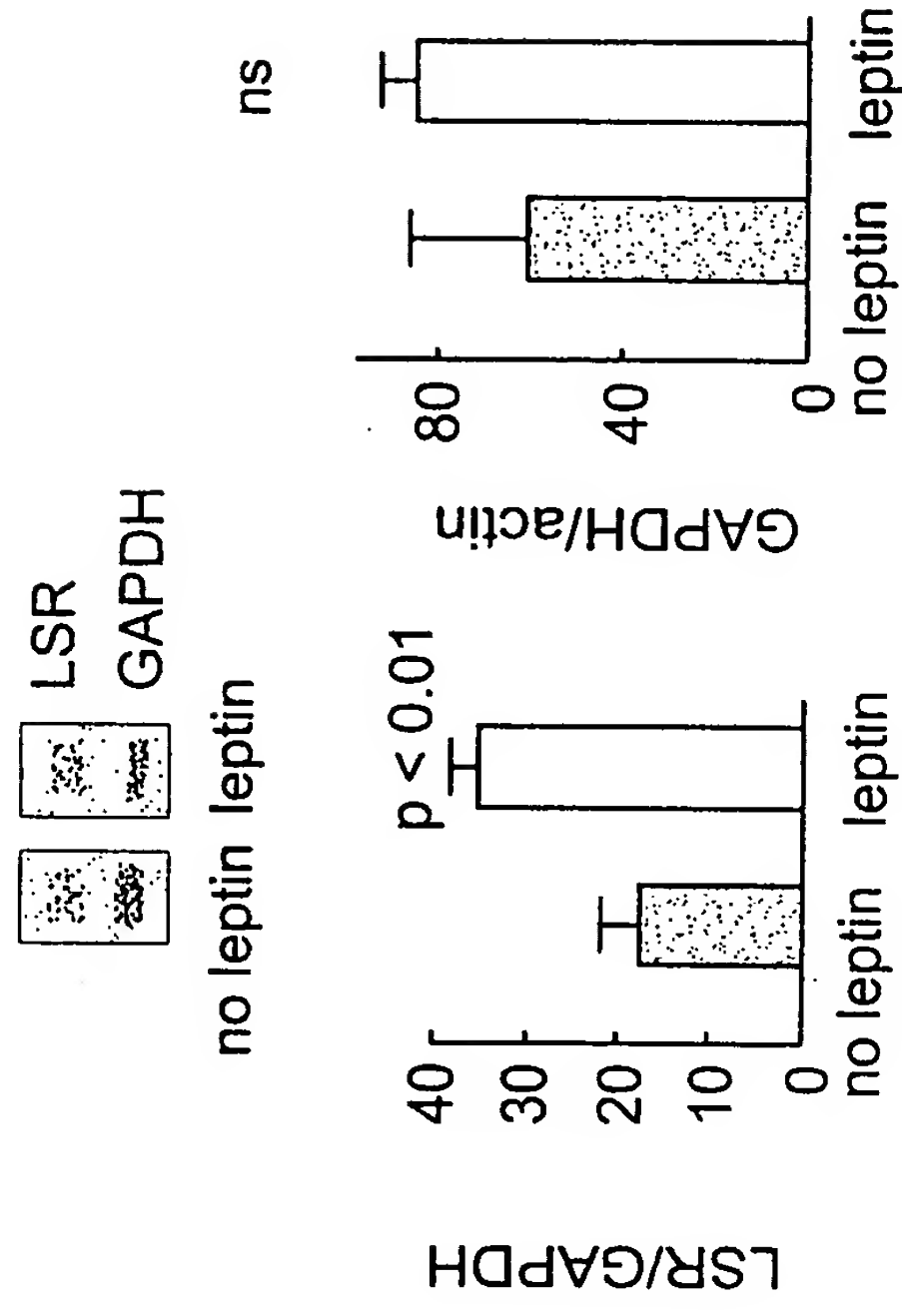


FIG. 29D

Northern blot



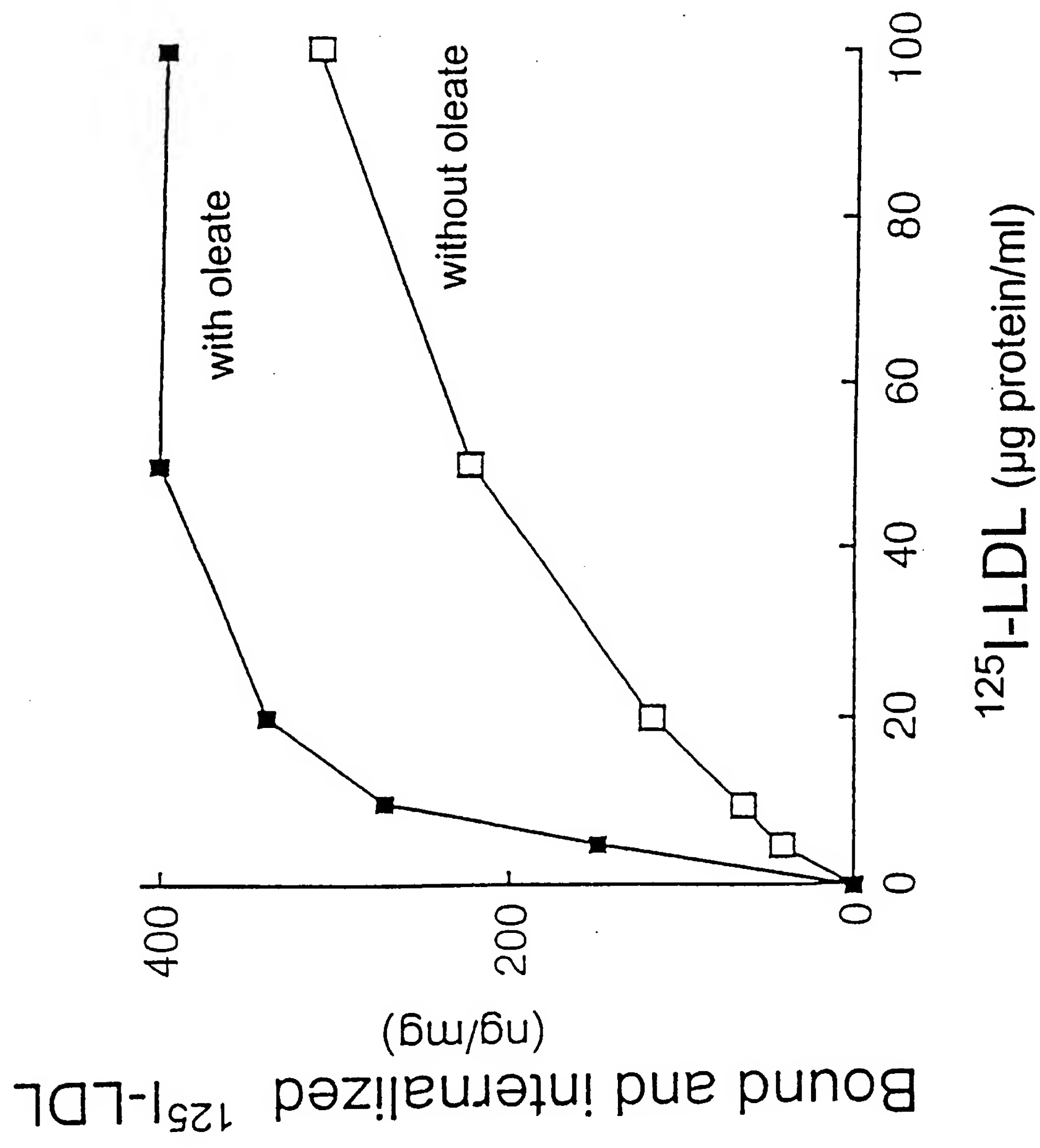


FIG. 30

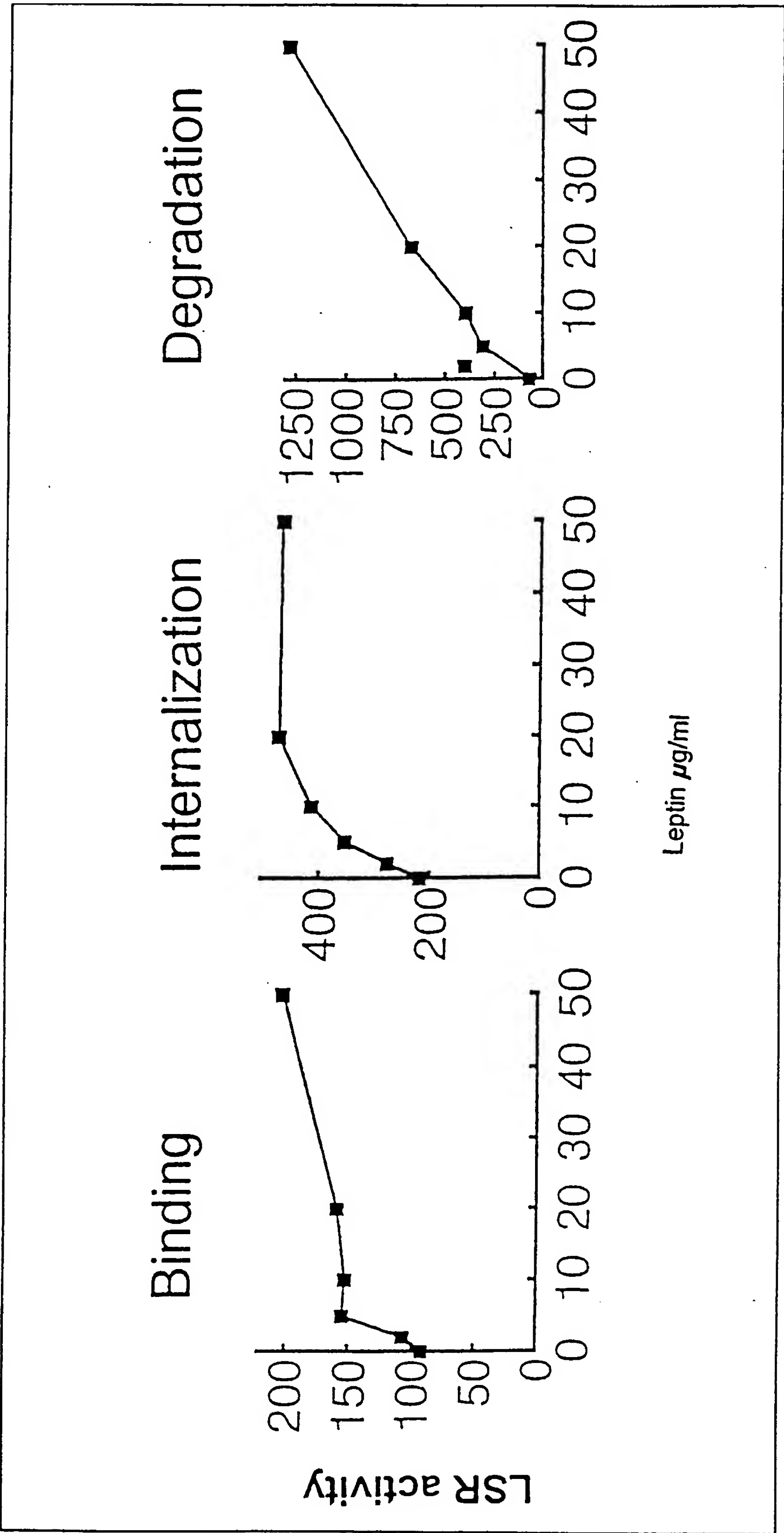


FIG. 31

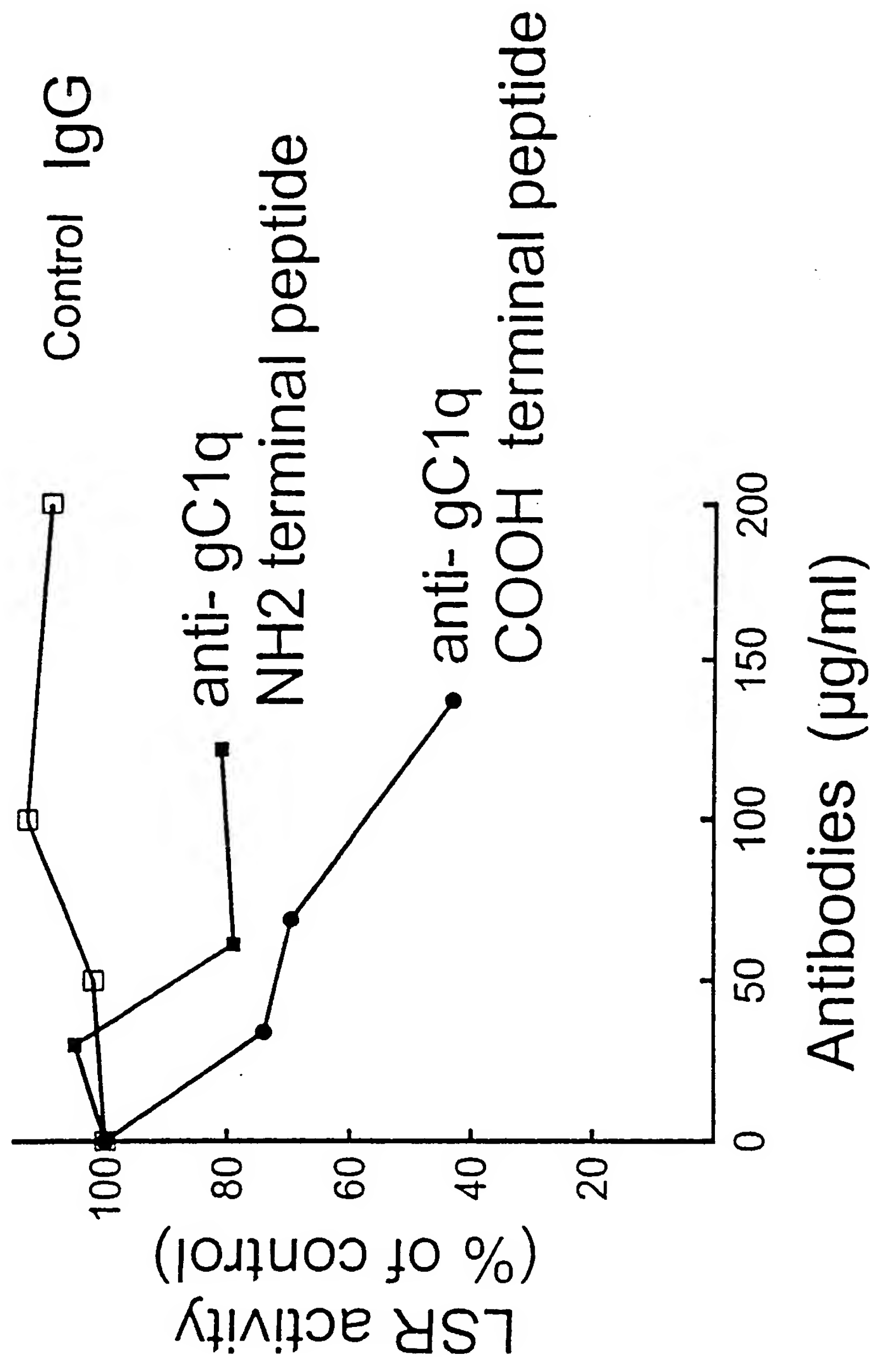


FIG. 32

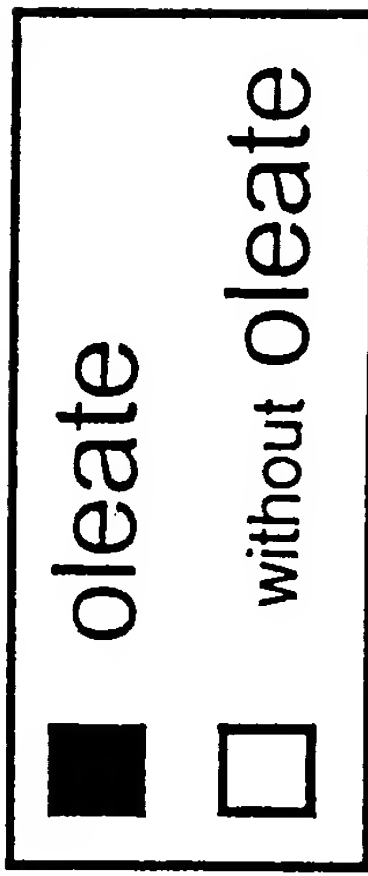
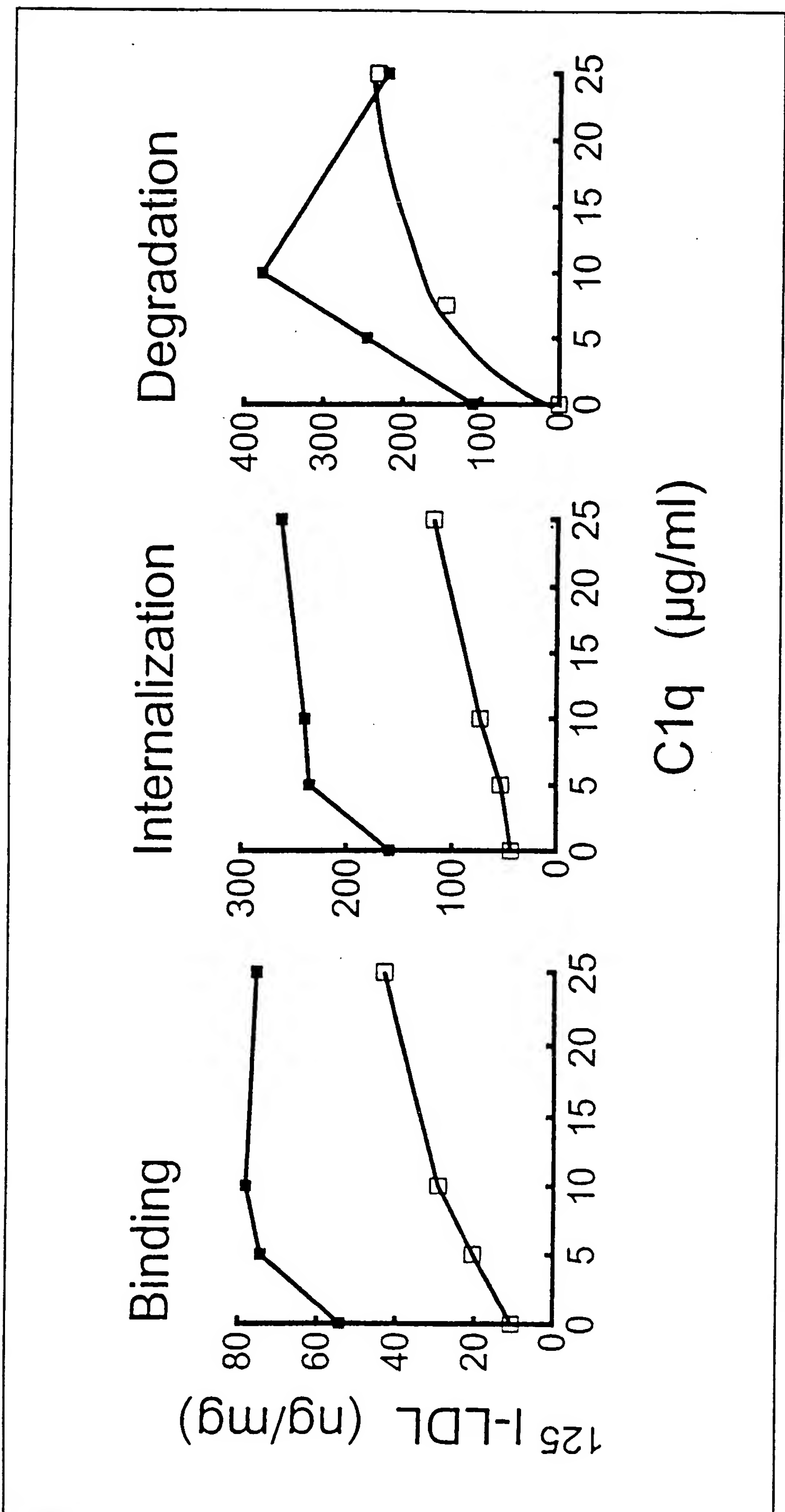


FIG. 33

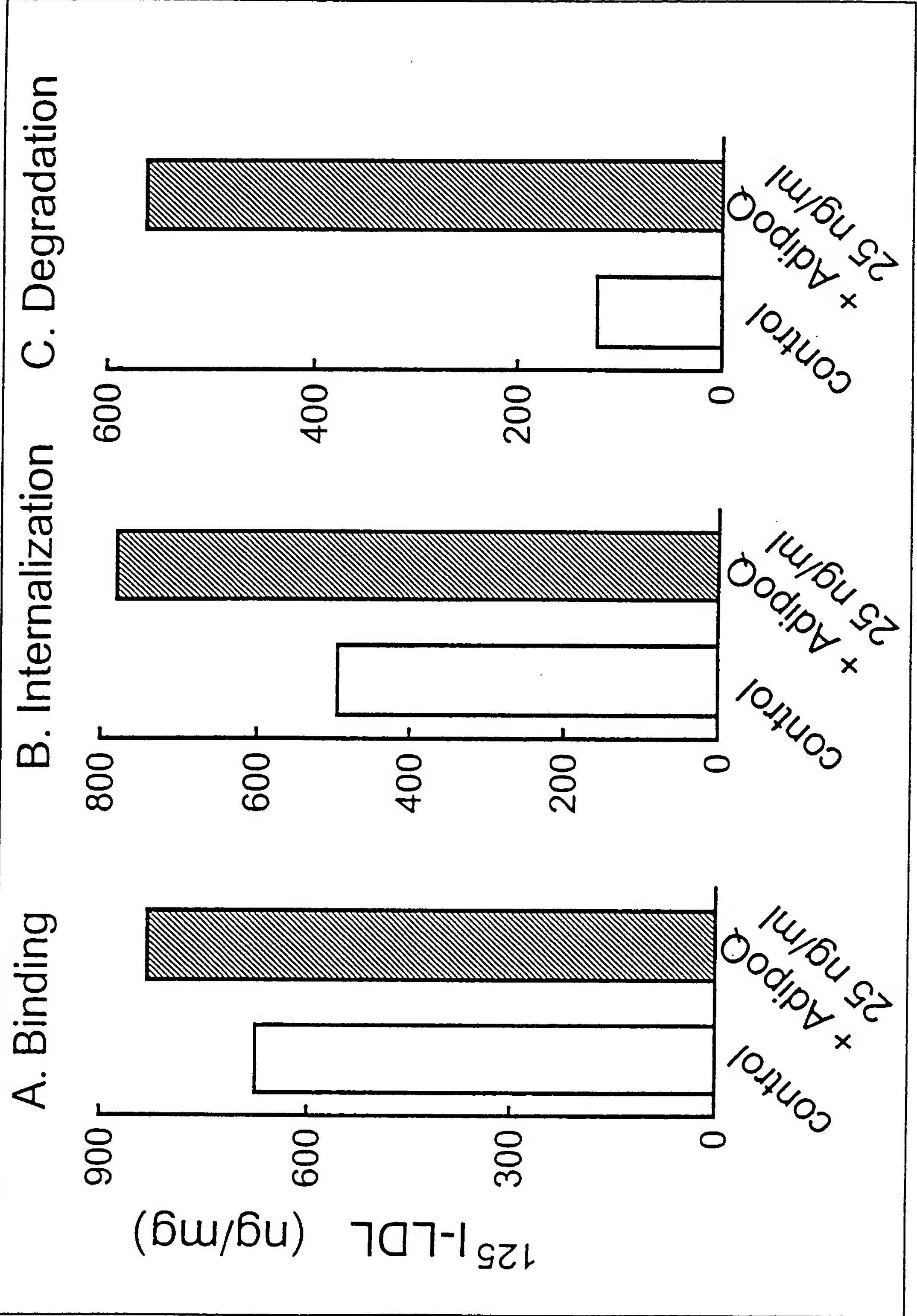


FIG. 34

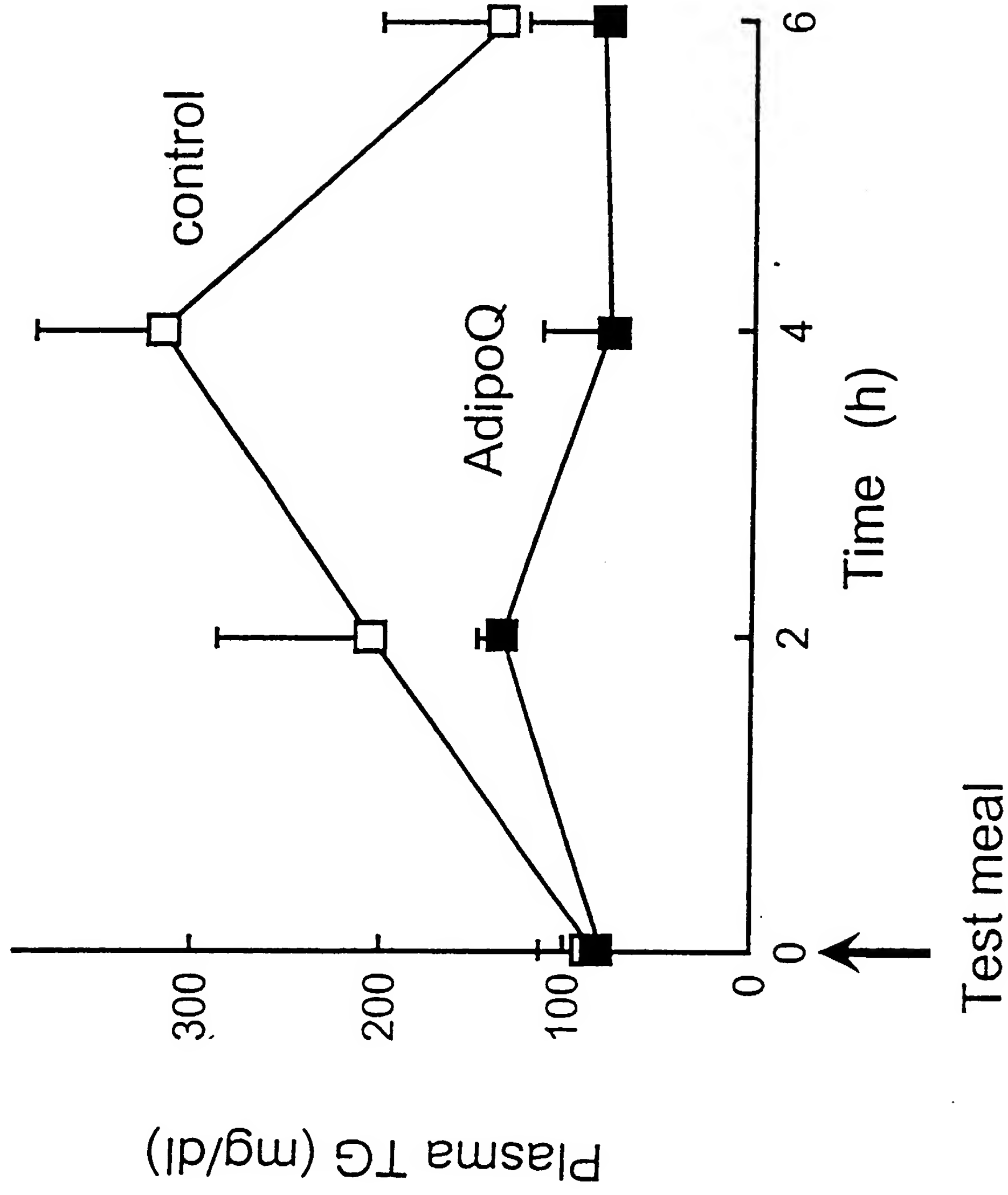
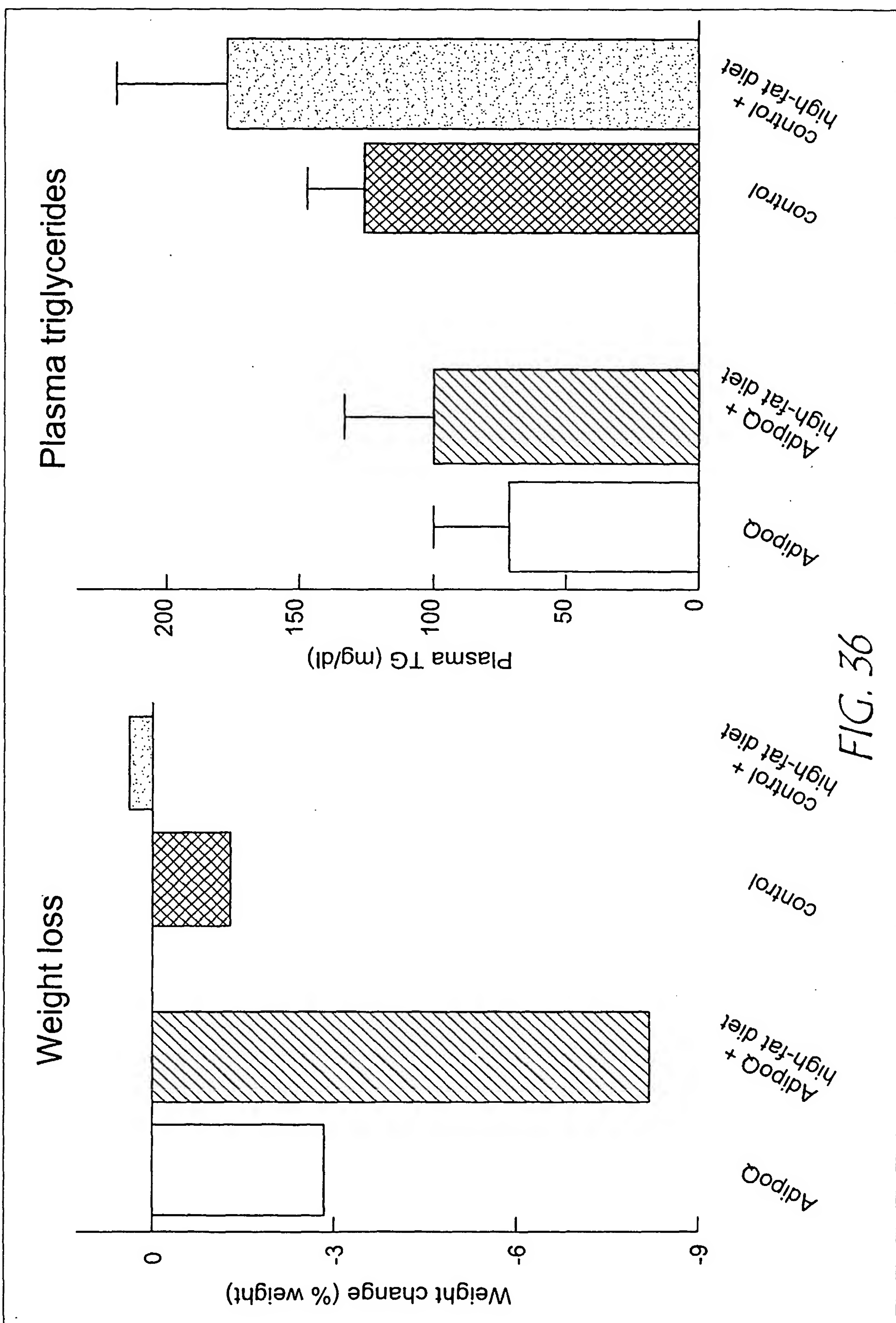


FIG. 35





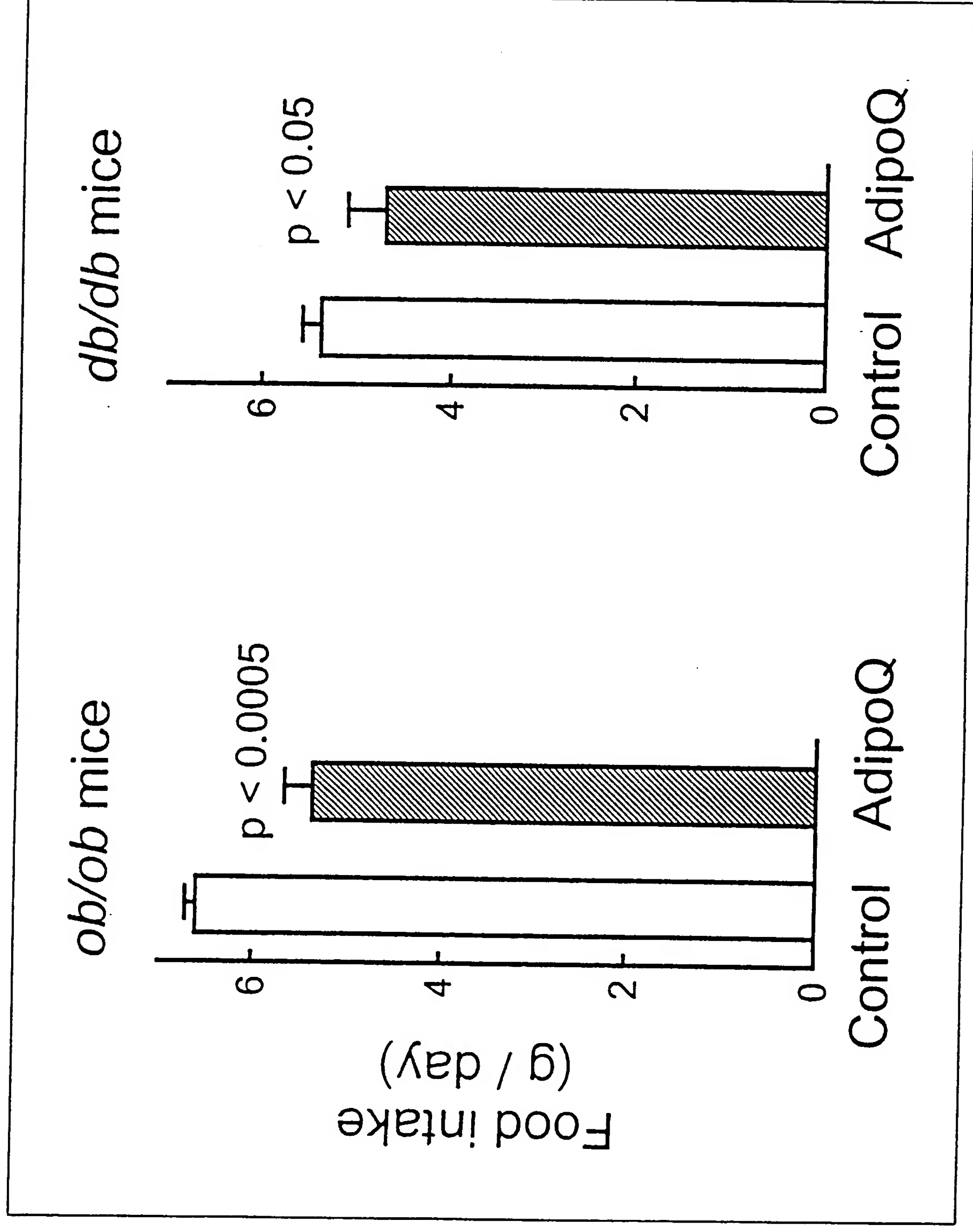


FIG. 37